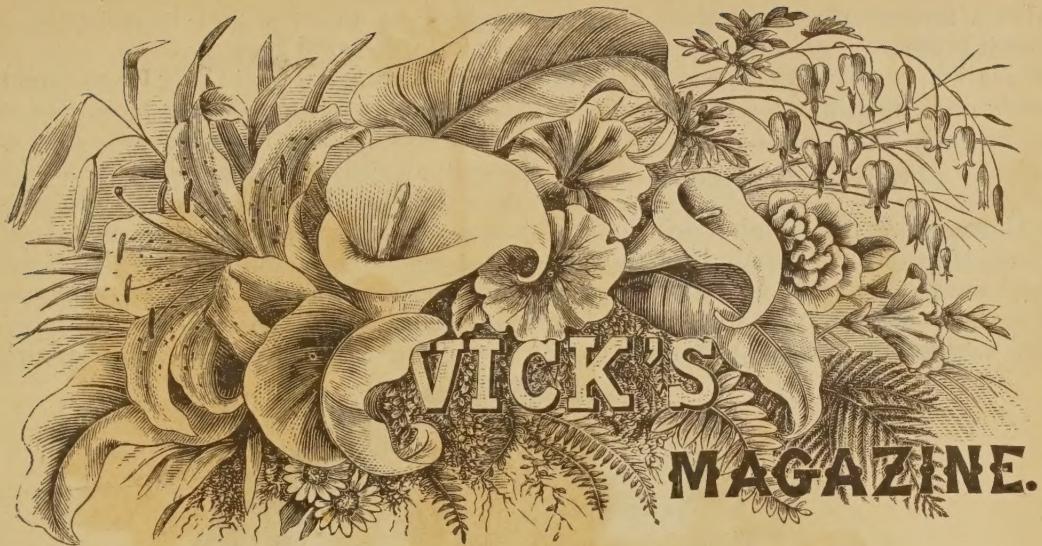


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DECEMBER, 1883.

THE CONDITION of horticulture in this country cannot be judged of by what may be seen in one, or a few communities. As is well known, the number of large and well kept private grounds with horticultural buildings and equipments is not great. Probably not as great as the same amount of wealth in Great Britain or Europe would show; but the reason of this is sufficiently apparent when we consider that few families here have been rich for any great length of time. Most of the surplus wealth has accumulated within the last fifty years, and the possessors have been too much occupied with business to cultivate their taste in gardening. Nor is the display made by wealth in horticultural affairs the true measure of the gardening spirit of the people. A far better index is the number of establishments in the horticultural trade, and the amount of business they conduct. We have not now at hand the statistics of this trade for the whole country, but can say that it is of vast proportions, and is rapidly increasing. Probably few are in a better position than the writer of forming a correct judgment on this subject. We are in constant communication with every part of the country, and from all parts we have inquiries in relation to the improvement and planting of grounds; in very many of these cases there is evidence of a nice appreciation of landscape beauty

and art. It may be said, and it is often true, that the desire for improving and planting of village and suburban grounds arises from a selfish and calculating spirit, with the design to increase their financial value. But this only shows that the public has a cultivated taste above those who are influenced by such motives, and that it is willing to pay for the gratification of that taste. It is only possible for a few to be governed by sordid motives in this manner, because the great mass is not; the exception proves the rule. The fact is, as a people we are beginning to have distinct and well defined horticultural ideas, and are seeking their expression. In most instances this is on a small or moderate scale, but it evinces the genuine spirit, nevertheless, and those possessed of it are as truly horticulturists as those who exhibit their taste in magnificence. The masses of the people are quietly imbibing this spirit, and slowly it is producing its results. The rearing of flowering plants is rapidly increasing. Window gardening is becoming a pleasing and healthful recreation, and proving a blessing to many homes. Tasteful conservatories are becoming common in connection with the best residences, and not a few have small and well kept greenhouses and stoves where their tastes can be more fully exercised. Year by year we witness the

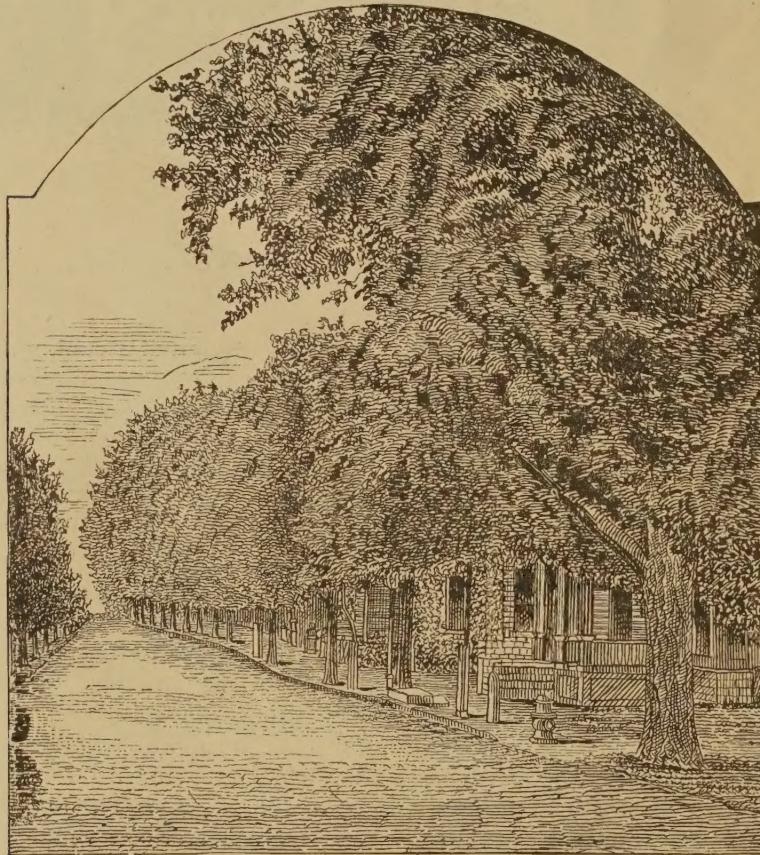
spread of this horticultural spirit, and with a feeling of gratification, knowing that it promotes healthful enjoyment and recreation, and brings the mind to the study and contemplation of nature.

HARRISBURGH.

Harrisburgh, the capital of Pennsylvania, is beautifully situated on the Susquehanna River—a river beautiful at all points, but especially so where the island and mountain scenery is prominent, as it

PEPPLE, and ROBERT GRAHAM, who was trained at BUIST'S, and is reckoned a capital soft-wood grower.

The private gardens along Front Street, from the residence of the Hon. SIMON CAMERON, for three quarters of a mile or so up the river to the residence of his son, the Hon. J. D. CAMERON, is probably as fine an example of continuous well kept street gardening as can be found anywhere in America. Among the somewhat unusual features may be mentioned the occurrence of vases and hanging



VIEW UP FRONT STREET.

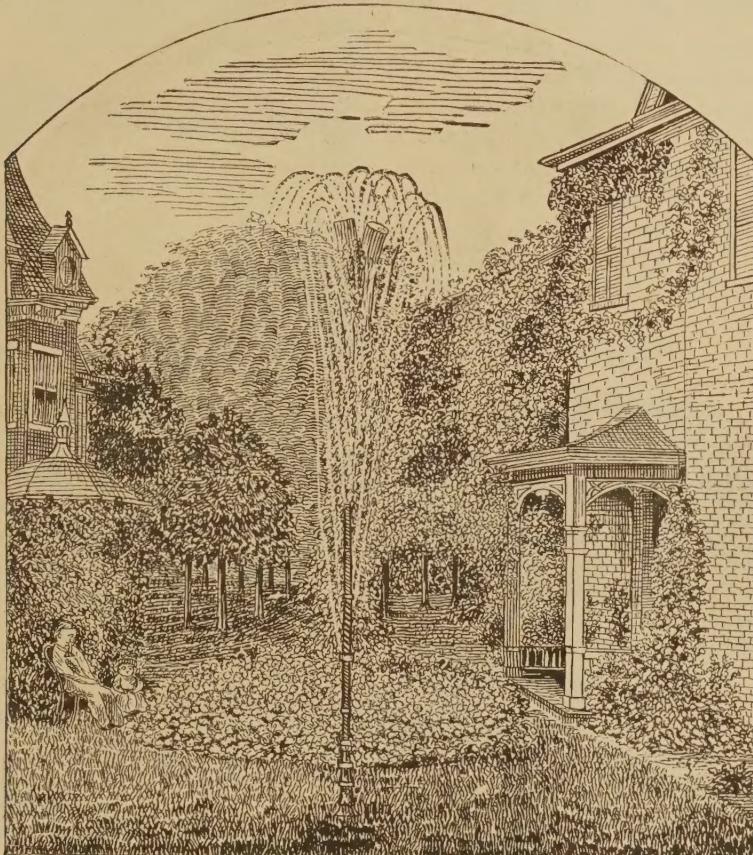
is at this place. The city is situated on the east bank of the beautiful Susquehanna, contains about thirty-eight thousand inhabitants, is a great railroad center, and is surrounded by a fine country, whose agricultural excellence makes its markets the best and cheapest in the State. The horticultural features of the place are worthy of some notice. The public grounds are the State House grounds, laid out by DOWNING, in part, in a style which savors of a past generation, and a Cemetery. There are several florist's establishments, chief among which are those of Mrs. GOVIOCK, Mr.

baskets upon and over the sidewalk, the shade of the street trees, and plenty of water rendering the employment of the finer Caladiums, Begonias and Ferns perfectly practicable and successful. The hanging baskets of Ferns, &c., are sometimes suspended from the iron fences, sometimes over the doors or along the piazzas. The balconies over the doors are often charmingly draped in greenery, and the grass kept in perfection. This, together with the singularly beautiful location of this river street, makes it a perfectly charming summer morning's walk. The residences of SIMON CAMERON and

WAYNE MACVEIGH open upon a pretty little garden in which are a range of vineyards and conservatories. One of the daughters of General BURNSIDE, now married, occupies the MACVEIGH house at the present time.

Any horticultural description of Harrisburgh would be incomplete which did not take in the charming country place belonging to the Hon. J. D. CAMERON, "Lochiel," as it is called, situate about a mile from the city. "Lochiel" embraces nearly seven hundred acres of magnifi-

is an old one, of no particular character, but charmingly embowered in Wistaria and Honeysuckle; one of the Wistarias being *Chinensis alba*, and probably one of the oldest, certainly one of the finest, in the country. From the house, across a beautiful foreground of lawn of about three acres, some of the most charming river scenery is discernible beyond the boundary plantations. To the east of the house, at the head of a miniature valley, bounded on either side by beautifully diversified planting, broken here and



GARDEN BETWEEN THE RESIDENCES OF SIMON CAMERON AND WAYNE MACVEIGH.

cent farms, the ironworks of the same name, and the gardens which Mr. CAMERON, with a generosity worthy his great sensitive nature, has always thrown freely open to the public, both on week days and Sundays. The grounds are on a gentle slope overlooking the Susquehanna, with its grouped islands, and on its opposite shore the mountains of York County. They are planted in the natural style, and comprise several distinct and separated stretches of beautifully kept lawn, the separation being effected by dense plantations of trees and flowering shrubs in unstinted variety. The house

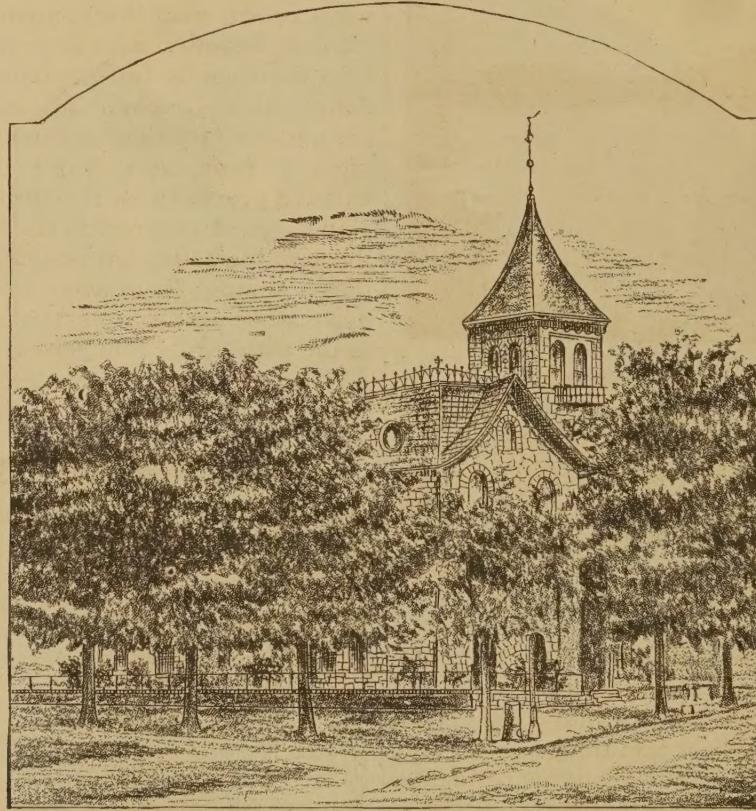
there with groups of sub-tropical and bedding plants, are the conservatories, a range of five useful houses in a cruciform shape, surrounded by a terrace from which other beautiful views of the river are obtainable.

Higher up the hill are the gardeners' houses and the forcing houses. In these are grown winter Cucumbers, Tomatoes, Roses, Grapes, Strawberries, Peaches, or anything which may be required for the furnishing of the conservatories or gardens. Taking it all in all "Lochiel" is one of the prettiest and best kept gardens in Pennsylvania, and its proprietor

one of the most liberal patrons of horticulture, one who maintains a fine place far more for the public than for himself.

In Harris' Park, directly opposite the residence of SIMON CAMERON, and on the river bank, surrounded by an iron fence, is an old tree stump, at the foot of which is the grave that holds the dust of JOHN HARRIS, the father of the founder of Harrisburgh. The stump is that of what was once a very fine Mulberry tree, and has been carefully preserved by the use of cement and other ways. One day, nearly a hundred and fifty years ago,

refused; in revenge they dragged Mr. HARRIS to this tree. Old Hercules, a black slave belonging to Mr. HARRIS, had, when his master was seized by the Shawnees savages, given the alarm to some friendly Indians of the Paxton tribe, who hurried across the river, just in time to rescue the good man. Mr. HARRIS was so grateful for his signal deliverance that he immediately emancipated his faithful slave, who had once before saved his master's life, and then gave to his own family strict charge to lay his remains, at his death, at the foot of



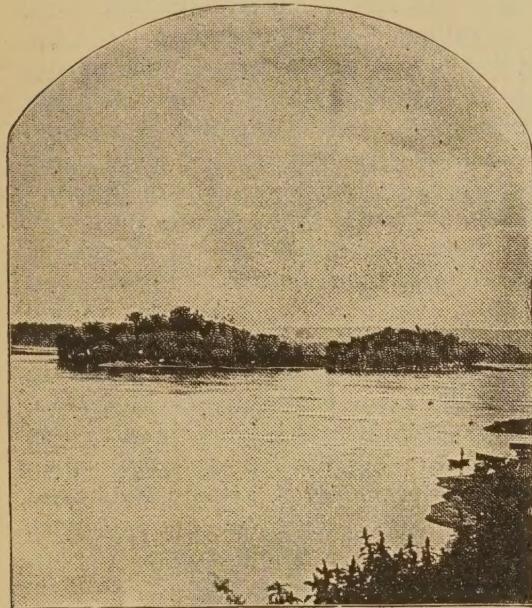
RESIDENCE OF HON. J. D. CAMERON.

JOHN HARRIS was standing against this tree, bound firmly to it. Dry wood was piled high around him, a lighted torch held close to the wood, and a crowd of drunken Shawnees Indians were dancing around, yelling their angry whoops into the doomed man's ears. They had come down the river on a trading excursion, and on their return had stopped at the store of Mr. HARRIS, who was an Indian trader. His warehouse and store were about two hundred yards below the place here pictured. The Indians demanded "lum," as they called whiskey or rum. They were already drunk, and they were

this Mulberry tree, which was accordingly done.

Just up the bank, opposite Harris' Park, stands a very old-fashioned stone mansion. It is quite as old as it looks, being one of the first large buildings erected on Front Street, when Harrisburg was but a county town. This old house is now the city home of the Hon. SIMON CAMERON, who, more than sixty years ago, it is said, entered Harrisburgh with all his worldly goods tied in a bundle, swung over his shoulder on a stick. Now he is a wealthy and influential man, made so by his own honest,

earnest efforts ; he has retired from the activities of public life, but closely observes, with unabated interest, the busy life around him. His labors in the service of his State and nation during the last half century need not be told. Mr.



INDEPENDENCE ISLAND.

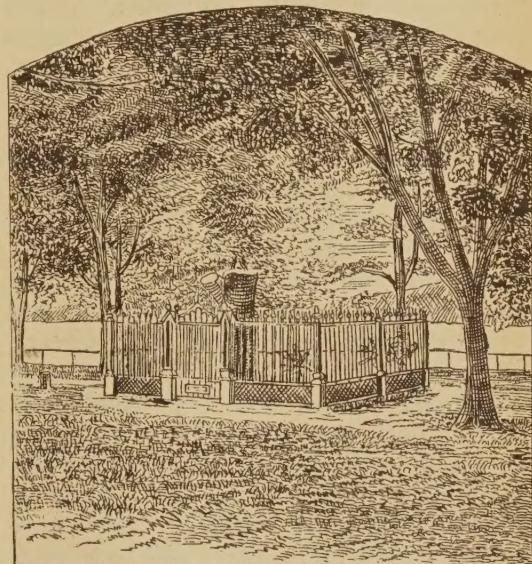
CAMERON is an octogenarian, and through all his long life agriculture in all its branches, with all measures for its improvement and encouragement, has commanded his influence because of his great interest in it. His home farm, some miles distant, is said to be a model of its kind. His greenhouses afford summer to him whenever he will enjoy it at both town and country residences. He manifests his love for the beautiful in nature by gathering about him things lovely and rare. In the grounds about his residence are numerous rare plants and trees, among which are two Mahogany trees. As an evidence of the esteem in which the aged statesman is held, it may be mentioned that our people desired that he should, with his own hand, plant a tree on the principal corner of the plat occupied by our new post office building. This the good man did, and as he held the slim young Poplar in place, his keen, bright face showed the interest he felt in the proper setting of a tree which may live to be as old as he is now. In early life Mr. CAMERON was a printer, and of the oldest three compositors in the State of Pennsylvania, all of whom are now living in Harrisburgh, Mr. C. is the

oldest. The post office building referred to has been recently completed, and cost about three hundred thousand dollars.

One of the many lovely views of the country about Harrisburgh, is that from the corner of State and Front Streets, and is what the fortunate inmates of Hon. J. D. CAMERON's beautiful mansion see from their windows as they look across the river to the Blue Mountains, in the northern distance. Travelers from other lands are rapturous in praise of the scenery about our city and the sunsets on our river, and those of our citizens who go to look upon nature abroad always return with the contented remark, "it is as beautiful here as anywhere."

In the river is Independence Island, a delightful spot where all conveniences are gathered for picnics from the city and villages near, who resort daily to its wooded precincts for recreation.

In marked contrast to the dwellings of those of the sovereign people, or at least, those among them who can build of hewn stone and marble, is the residence, at the corner of Front Street and Barber Avenue, provided for the chief servant of said people. A plain, though commodi-

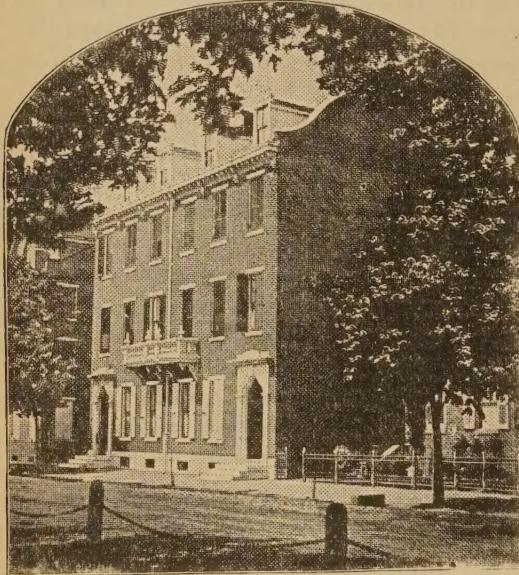


TOMB OF WM. HARRIS.

ous house, in fact, two houses connected by inner doors. It is built of red, pressed brick, and is as square and unpretending as the executive who now occupies it. One-half of the building is devoted to the use of "the people," and contains the ball room, reception and side rooms. The skill of the florist transforms this

part into a wilderness of beauty whenever the servant invites the "sovereigns" to call upon him. The other half is complete in its appointments for family uses.

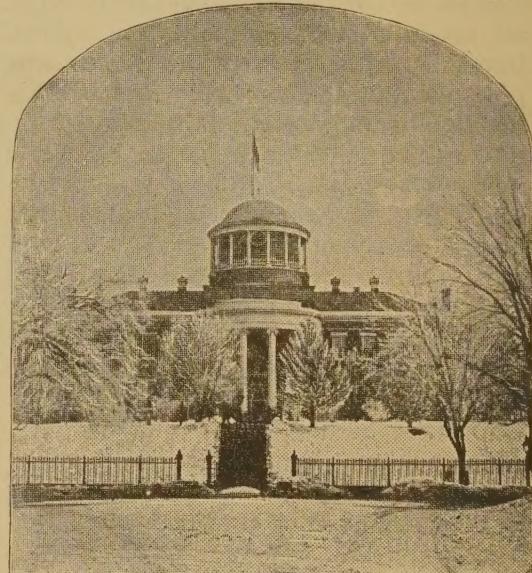
The Capital Park is somewhat more than ten acres in extent, and is bounded



THE GOVERNOR'S RESIDENCE.

by Walnut, North, Third and Fourth Streets. Entrances are ample on the different streets, and the grounds about the State House and its Department buildings, or wings, as they are called, are beautifully laid out. Trees, both old and young, fill the place, and so numerous are the varieties that the florist in charge is about to classify them, and affix to each tree a tag, on which both the Latin and English names will be legibly printed. There are also many flowering plants on the sodded plats among the trees and along the broad walks and drives. The walk leading in from the Walnut Street entrance is popularly used by frequenters of the park and buildings. The green sward on both sides of this walk is ornamented with mottoes grown in dwarf Feverfew and the different varieties of Coleus. "Virtue, Liberty and Independence" appears on the right side, while on the left is the motto, "United we stand, divided we fall." At the right side of the walk, near the entrance to the buildings, is an ornamental fountain. The water is forced to a great height through a huge rockery, and falls in spray over Ferns, Caladiums, Callas and other moisture-loving plants, of which there are many kinds we cannot name, nestling about

among the rocks and mosses. Outside the bed of the fountain, around the basin formed by the water spouts and jets, is a circle of Cannas, then another of Dwarf Cockscombs, and then Geraniums of endless variety of leaf and flower. Between the last circle and the enclosing iron railing, a number of large trees, the oldest in the place, form a magnificent guard to the lovely spot. Here, too, is a Mahogany tree, which, with two in Gen. CAMERON's garden, are, we have been informed, the only specimens of the kind in Pennsylvania. Underneath these tall old trees the florist has arranged his blooming treasures in fanciful figures and shapes. On four opposite sides of the enclosure about the fountain are two Maltese crosses, and two squares in shape like arrow heads, made with Coleus, shaded from the dark crimson and green centers to the lightest green edges; then stars of Geraniums and Dusty Miller, and cornucopias of Geraniums and Coleus. At odd spaces are stands with Yuccas, Ivies and gay drooping plants. There is also one fine circle of Fuchsias, making in all an enchanting spot.



THE CAPITOL. 1

The winter view of the Capitol, as shown in the engraving, appears refreshingly cool this sultry twenty-second day of August. The snow-laden trees look, in their way, as beautiful as when "with leafy verdure clad." The waving flag means to tell us that the Legislature is in session. The view here presented is that

of the main entrance, as seen from State Street, and this portico is the place where the Governor of this State takes the oath of office as chief magistrate. The height of the building from the ground to the top of the dome is one hundred and eighty feet. A four-faced clock is in the dome, and the view from the gallery around it is surpassingly fine. The eminence on which this building is placed adds to the imposing appearance of its rather plain style of architecture.

State Street is one hundred and twenty-five feet wide, and extends to the river, and some of the finest mansions and most costly churches are built in this locality.

There are greenhouses at the Capitol and at several private places, as already noticed. There are no streets laid out with spaces or plats of green, as in Philadelphia, nor are there rows of houses with dainty gardens extending the whole length of streets, but our people love flowers. The wealthier portion frequently make quite a display of Palms and other showy plants and vines, often setting them out in large boxes along the curb as well as against the house. Those of less means have vines, hanging baskets, vases, &c., around the front entrance. On Second Street there are two balconies literally loaded with plants, rare and common, which make a perfect wilderness of green and bloom. The halls and windows of those who have little space and less money, are often made beautiful by the tasteful arrangement of plants we call cheap and common only because they grow easily and cost little. In the suburbs, and along the roads leading from the city to the country seats of the rich, or to the small towns and villages around our capital, is abundant evidence of the growing delight of both high and humble in beautiful things, found in highest perfection only in the pursuit of the art of horticulture.

And then, our cemeteries. You remember the old time couplet,

"The living know that they must die,
Yet all the dead forgotten lie."

Not here, indeed! Not at Harrisburgh! Our dead rest amid lavish profusion of bloom and forest, often hiding the memorial stone and carved epitaph.

We have no horticultural society, but as a community we love plants and flowers.

FRUIT RAISING.

Thirty years ago, and after our rural population had well recovered from the excitement, for such it was, of planting *Morus multicaulis* for rearing silk-worms, they became interested in the planting of dwarf Pear trees, which then promised to reward the enterprising possessors with fortunes in a short time. Great numbers of orchards were planted, and in all parts of the country. We need not say that disappointment followed; and yet the dwarf Pear tree properly managed is one of the greatest blessings of our fruit gardens. The mistake made was that these trees would thrive in all locations, all soils, and in all parts of the country, and without any trained skill in their care. We are constantly receiving communications from parties making inquiry in regard to the best varieties of fruits to plant for market, and asking our opinion of the advisability of engaging in fruit-growing. Those who take this course, and thus seek advice, are the more prudent ones of those who engage in fruit-growing without a practical knowledge of it.

Now, in answer to the first inquiry it may be said, take the advice of your neighbors who may have already engaged in this pursuit. If they have met with success with certain varieties, it is evidence that those varieties are adapted to your locality. If in your immediate neighborhood fruit raising has not been much attempted, that fact of itself may or may not, according to circumstances, be evidence on the face that the locality is unsuited to the pursuit. But if there should be a reasonable prospect that certain kinds of fruits can be raised, seek the nearest locality situated similarly to your own, and learn what has been done there.

Another source of most reliable information in this case is the catalogue of the American Pomological Society. We can not give this Society too much credit for all the work it has done within the last thirty years. It has enlisted the interest of the best pomologists and fruit-growers of the country, and such men as WILDER and DOWNING, and THOMAS and BARRY, and HOVEY and WARDER, and a host of others well known in their profession, have enriched its records with their experience and judgment. The catalogue

of this society, which is carefully corrected by the reports made at each biennial session, gives the relative value of each variety of fruit that has been tested for each State and Territory and Canada. By following the indications of these records, novices in fruit culture cannot go very far astray. As new varieties of fruit are constantly being presented, the very latest arrivals will not always be found in the pages of the society's catalogue; and the absence of safe advice in regard to new varieties may be the very cause of a beginner's failure. New varieties of fruits are often very fascinating; they appeal to our imagination, their excellent qualities are magnified and extolled, their deficiencies, if any are allowed them, are excused, and the mind perceives them only as something altogether desirable, they are "Apples of gold." Young fruit-grower, do not be deceived. There never was a perfect fruit of any kind, and there never will be. The old story of our first mother's pomological experience may have a measure of truth for us in this connection. Not that we think new fruits are forbidden fruits, for in new varieties rests a large share of the latent force that shall energize the activities of fruit-growers in the future. In fact, every fruit-grower worthy of his profession will know for himself what there is to be known in regard to all new varieties, at least, of such fruit as he cultivates. New varieties are our hope, and he is a poor man who is without a hope. But the beginner in fruit-growing must commence with well proved and reliable varieties. He must not be induced to invest in new varieties through the influence of the well-told tale of the tree dealer, nor by the attractiveness of a skillfully colored plate, nor by a high sounding name, even though it be one that in its usual associations commands our respect or veneration. Let every young fruit-grower indulge in new and untried varieties only to the extent of his willingness to lose his investment, or of considering the amount expended as so much to promote his education in his profession. With this understanding he will make no serious mistake; his purchases of new varieties will be merely for trial, and their cultivation with this end in view will be extremely interesting. Some varieties of fruit are specially adapted to

one particular kind of soil, and others to some other kind, even in the same locality, and this point must be well understood.

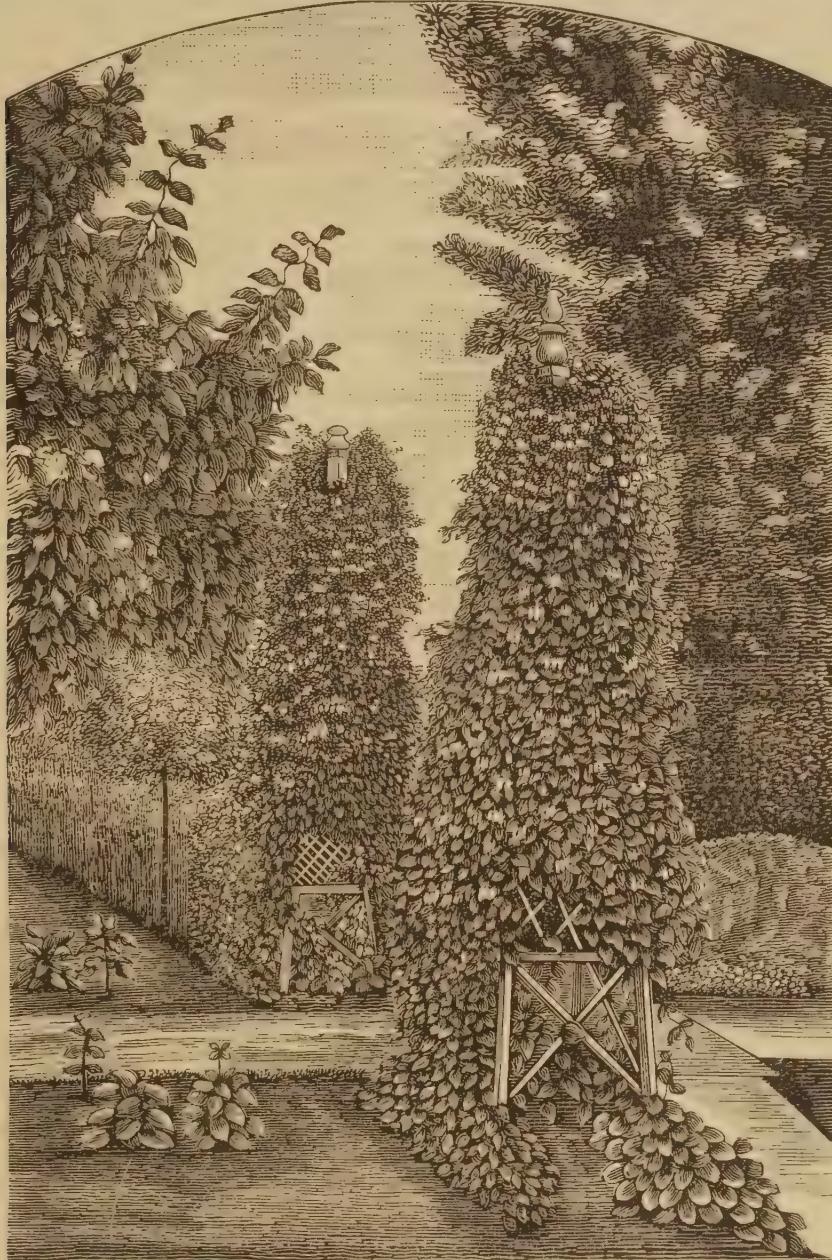
But above the question of varieties, and the suitability of soil and climate, there are other considerations. One of these is the availability of a proper market. With the numerous railroads that transverse the country, intersecting each other like net-work, this question is much simplified; still, some fruits, berries, for instance, can be sent but a short distance, and are quickly perishable; a few cents on each package measures the profit on the whole business, and no great risk of marketing can be taken. This applies with particular force to the Strawberry. Other berries can be dried. Immense amounts of small fruits are now used by canning establishments, and these usually pay the grower fair prices. Raspberries, Blackberries and Currants, and also Apples, Peaches, Plums and Cherries, can be profitably raised for drying, but that this state of things will continue long there is no guarantee, for any special culture that is fairly profitable will be entered upon by others until the profits are reduced to the general level. Notwithstanding all competition, however, and all unfavorable circumstances, the character of the man himself must be the governing fact in relation to success in fruit-growing, as it is in every other undertaking. A good cultivator, prompt in all his work, watchful to guard against disasters, from weather or insects; intelligent, to ship and market his crop to the best advantage, and to supply himself with the best varieties after their value has been proved; financially correct, keeping his records and accounts so as to show a balance on the right side; energetic, to keep in advance of every detail of his business; such a man will command success and dignify his calling.

WINTER.—Winter, on this fourteenth day of November, appears to have come to stay. The year throughout has been the coldest in our memory. Many crops have been materially shortened and injured by the low temperature, and undoubtedly many homes will feel straitened thereby. We are made to feel very sensibly the entire dependence of the earth for all its life and beauty upon the sun, the center of our world-system.

HALL'S HONEYSUCKLE.

Hall's Honeysuckle has proved a general favorite, and it is probable that it is now more planted in this country than all other varieties together. We concur in this public estimate of it, although we

to summer. Sometimes, as we have seen it draping a porch, on pleasant days in winter when the sun was shining, it has seemed like a smile of summer. The plant is a strong and rapid grower, and will quickly cover a large space. Our engraving shows a pair of these plants



think very highly of several others. One admirable feature of it is the persistency of its foliage. The leaves retain their color and cling to the stems almost until spring in this climate of severe cold and heavy winds. To be sure, its appearance is rather odd, because so unusual to us, but we need not say it is pleasing, for it brings us back with a bound from winter

trained on pillars in the fruit garden. This is only one of the many ways it may be employed.

The flowers, which are first white but afterwards turn to a straw color, are borne in the greatest profusion, and fill the air with a rich fragrance. The blooming continues from June until well into the fall. In the south, we suppose,

it must be almost ever-blooming. Far more growth and bloom will be made by this plant in the garden, or in cultivated ground, than when in sod, as plants usually are when trained by a porch; still, they are useful and good in this situation. The flowers are always desirable for cutting, and are so fine and sweet that they can be employed on any occasion.

EXPERIMENT STATION.

The New York Experimental Station, at Geneva, in this State, is pursuing investigations which must undoubtedly be of value to the cultivators of this country. At the same time it must be fully understood that all experiments require to be repeated several times under the same and under various conditions, consequently we must expect the reports of the station to be increasingly valuable as they continue to be made; We here mention the results of only one of a few experiments that have been made the past year under such circumstances as to indicate trustworthiness. A trial of the relative value, for planting, of the tip, central and butt kernels of ears of Corn, showed that

" 1. The tip kernels were the most prolific of good Corn.

" 2. The butt kernels were more prolific of good Corn than the central kernels.

" 3. The tip kernels bore longer ears than the other kernels, the butt kernels the next, and the central kernels the shortest. This fact was apparent to the sight as the Corn lay upon the ground after husking.

" 4. The merchantable ears from the butt were distinctly heavier than those from the tip, and those from the tip distinctly heavier than those from the central kernels.

" 5. The butt kernels furnished more unmerchantable Corn than did the central kernels, and the central kernels more than did the tip kernels."

An experimental test of the value of the butt end and seed end of Potatoes, made by planting the seed ends and stem ends, two rows of each, the Potato being cut in half, and each half being used in the opponent rows, gave the following result: the two rows containing fifty plants from seed ends yielded fifty-four and one-quarter pounds of merchantable

tubers, and five pounds of small tubers; and two rows of the same number of plants from the stem ends yielded thirty-two and three-quarter pounds of merchantable tubers, and five and three-quarter pounds of small tubers.

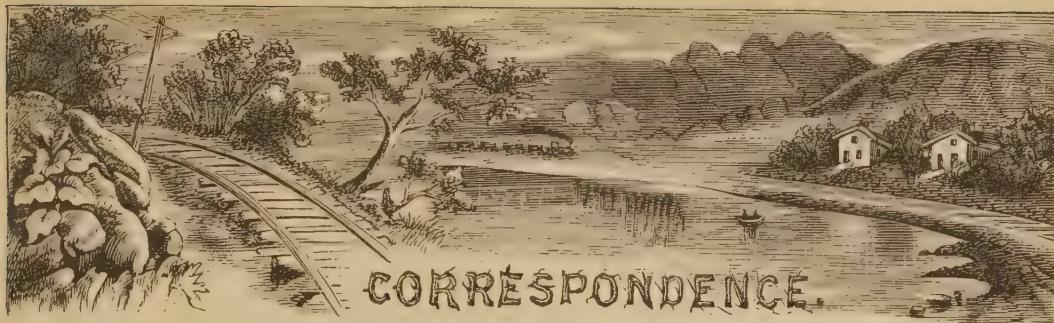
A number of experiments in reference to planting whole tubers, or cut ones, in the ordinary manner, or single eyes, all favored deep cut single eyes.

CALIOPSIS.

For a mass of rich, warm color in the garden, can anything be superior to a bed of Calliopsis, such as shown in our colored plate! These plants are natives of this country, being found in a wild state at the west and southwest. *Calliopsis bicolor*, shown by the central flower, is found in Arkansas. *C. Drummondi*, as shown by the upper left hand flower, grows wild in Texas; this species is sometimes called *C. basalis*, and is specially distinguished by the small dots at the base of the ray flowers. *C. atrosanguinea*, shown by the dark flower at the upper left hand side, is thought to be derived from *C. Drummondi*; the double variety shows for itself what it is, and at the left of it is *C. marmorata*.

The Calliopsis is suited to our climate, revels in its bright suns, and can stand well the various weather changes of our summers. It is everybody's flower. The plants are easily and quickly raised from seed, and remain in flower until late in the fall. The name, Calliopsis, means beautiful eye; and certainly no one can question its appropriateness; but easily can the imagination associate it with some gentle spirit, that, through it looks out upon the fair world, and thus expresses its love to the children of men. Cut flowers of Calliopsis and blue Delphiniums, or other blue flowers, make a showy vase.

THE SEED CROP.—The past cold and wet season has given short crops of many kinds of seeds, and in some cases they have been imperfectly matured. Far more than usual care is necessary at this time to examine and sort seeds and test them to make sure of their germinating capacity. This labor, while increasing their value, adds to their expense, but poor seeds are dear at any price.



CORRESPONDENCE.

A WILD-FLOWER TALK.

The Massachusetts Horticultural Society is one of the old and honorable institutions of Boston, as much so as the State House, Music Hall, or the Great Organ which is to be sold after all for being too great for its place. It is a pleasant *devoir*, Saturdays, in town, to go up stairs in Horticultural Hall, and spend ten minutes over the weekly show of fruit and flowers, after Society meeting. Last week (August) the charm of the collection was not President HAYES' twenty bouquets of Roses, or his great Azaleas, which open more like translucently flushed Lilies than their own kind, but two groups of native wild flowers, fresh, full plants, clearly labelled with both the botanical and the English names, which, after all, convey most the character and associations of the flower. The State which the Northmen rovers, and first settlers from England, found so fair and fragrant with its wild Roses, wild Grapes and soft airs is still a shore of beauty, the haunt of wild-flowers and aromatic plants. Those who think of Massachusetts as ice-bound, the home of grim winters and raw east winds are many. The State is not at all one of puritanic temper as regards scenery and weather, for the remains are still, felt of the volcanic origin and romantic mildness, when the Gulf Stream drove straight against her coasts, and her woods have a semi-tropic list of rich, fragrant plants, from which all her hillsides are blowing balm this sunny August. These fifty different plants gathered near Woburn at one time, show something of the resources from which botanists may draw. We, the elder, mother, and the middle aged girl, were specially delighted with these collections, for we had been spending days out on the hillsides, in the still,

dry, perfect sunshine, in pleasant fashion, lingering over every rod of ground that had the least thing to offer us, enchanted with all the summer held, finding strange sights of white coraline fungi in shaded spots of the woods, small mushrooms, carmine, or ivory, of exquisite shape and color, the transparent Corpse Plant startling with its tiny apparition, a pearl carving touched with black, Ferns grown to the length of swords in groups of five or six varieties close together, leaves blanched to papery whiteness in the shadows, yet growing in strange etiolated life, or we came upon upon such charming sights as a bank of Rattlesnake Plantain in flower, its creamy tapers rising straight and fair from its nest of freckled leaves, not far from where, in June, we found the earth starred with Partridge Berry in flower, to my thinking the most exquisite in blossom and odor of any plant alive.

One day, we went through a winding wood track to the old Dedham Chestnuts, trees twenty-seven feet in girth, branching grandly, and reverend with age, for only half their wide boughs are leaving any longer. In England such trees would be preserved and visited as the pride of the country side. Perhaps these are no less venerable, standing as they do on the brink of a brook in the heart of a woody tangle, as wild almost as when the Puritan threaded it, match-lock in hand, with one eye alert for savages stealing behind the thickets. What wealth of wild plants we found to gather, going prepared with baskets, trowel and stout knife. The pleasure of a wood walk is marred if you have not a strong knife with you to sever trails of Clematis and Woodbine, or to cut some gold or crimson branch. First, a group of Rudbeckia was marked to take up for the

garden, for we have nothing cultivated to equal its tall grace and dwarf, orange suns of bloom. Then, by the ruined cellar of an old home, whose stepping stones only were left in the green sward, I found with delight what I had been wishing for, clumps of the old-fashioned garden plant which now shrinks, shy and disgraced, in wild corners, too pale and sweet a blossom for its name of Bouncing Bet. Something wrong here, for this is evidently of good family, the Gilliflower, and I was going to call it the Deptford Pink, one of the earliest flowers brought by the colonists from England, but that it scatters, and my rescued beauty with its complexion of palest shell pink has, also, a delicate fresh odor. It is not the Soapwort, which properly is called Bouncing Bet. Can any one give

the correct name and lineage of this runagate plant? Time was, when a girl of twelve, I could sit down on a hillside and make out the true name and family of any blossom that took my fancy, thanks to a mother who loved flowers, and to a thorough grounding in Wood's Botany, that blessed and best of text-books. Those who know it well never can think of the old plant-lover, who went to his rest the other day without thanks and affection. Alas, the woman of forty must not look too closely at the tiny bracts and stipules, or count the stamens of a flower, in dread of straining eyes which must be saved for other work. I trust soon to give up the reading of print for the preferable reading of things themselves. We ought to out-grow books with time. But a goodly root of my Deptford Pink, if it is a Pink, went home for the long border of stray old favorites. Then, in a grassy wheel-track we came on the Wild Bergamot, with its pleasant fragrance, and took store of it for the herb borders. Mother was wishing she could find a sprig of Pennyroyal for its peppery scent, full of old-fashioned ideas, when, in the shadier track, rose myriads of slender, spicy seedlings in bloom, and for the old times' sake we gathered handfuls, thinking how, perhaps, the old women, esteemed witches in former days, had gathered herbs along that very track in the forest, or the squaws had crept there hunting Pipsissewa and mints for fever drinks. I have a fancy for herbs and herb-lore, and have had beds of

wood mold made in perpetual shade in one corner of the garden for wild roots and mints, where they increase kindly. In a narrow way, barely passable between plants breast high, we came upon Golden Rod just breaking bud, where the spot was literally golden with it four feet tall, and we gathered sheaves for the large vases, where with spikes of scarlet Gladiolus, softened with olive-golden leaves and grasses, and Sumach berries in velvety clusters, crimson to fairly black, they fill one corner of the room with unutterable splendor. I advise those who like superb, warm, harmonious-color to try such a blending. It has one merit, that it will last, with care, two weeks, if all the leaves are rubbed off the stalks in water, a rule to follow in all vases.

Our next find was a Sweet Brier growing wild, and fragrant as the English Brier in the garden. How came it in this jungle, half a mile from any house? What Puritan hand took the cuttings from the English walled garden and tended them with loving hands in the strange, fair Massachusetts wilderness, and gave them leave to root here? I shall look for traces of some forest dwelling near the plants; perhaps a roof burned in an Indian attack, and a home destroyed, which left no sign but this stray, lovely Sweet Brier. The plants are a find, being stronger and more fragrant than that in the garden. We must look after the treasures of our woods, or we shall end by slighting some of the sweetest flowers.

The collection at the show, Saturday, had a prize in the native Forget-me-not, which is lovelier than any I have seen at florists' here. About Hingham and Woburn this charming flower is found in perfection, growing six to ten inches high, with clear, delicate blossoms in which blue, white and the pink under-tinge of the sepals are sweetly mingled. No other variety I have ever known, however, compares with the Forget-me-nots found by the streams in the steep canyons of Utah; great, lovely blossoms growing in masses of blue on the edge of the clear, arrowy water, on stems thirteen inches high and over. Will you give me leave, Mr. Editor, here and now, to say, I wish to exchange for good plants of this wild Utah Forget-me-not, any

thing likely to be wanted in an ordinary garden, Rose slips, Heliotrope, Geraniums, &c. But the glory of the collection was two varieties of the *Sabbatia chloroides*, *rosea* and *alba*. Imagine a finer, clearer field Daisy, with an ivory finish and smoothness to its petals, over the tinted variety of which a pink tinge was drawn, delicate as that of a Mountain Rose, shading into firm, clear white at the base. This deserves to rank among our favorite garden flowers, and to its miracle of exquisite trailing is added a perfume that is a slighter scent of Tea Rose. I would go miles on foot to find a *Sabbatia*, but how is one ever to scour the leagues between this place and the Milton Blue Hills, when each furlong reveals so much to delight in and return to!

I have had exactly two new gowns, this season, both ready made, and the cheapest of their kind, but I do not feel that I can lose the brightness of the outdoor world to sit at home stitching, as my neighbor women do. They are worn out with their work, and can barely drag about their houses with help of tonics. They "don't see how I can work as I do in-doors and in the garden; it would kill them," and I never can make them know that the out-door days find strength for in-door life.—SUSAN POWER.

ARRANGEMENT OF FLOWERS.

We read a great deal about the proper arrangement of flowers when used in vases; some of these instructions are good, and some I must take exceptions to. For instance: In a late English magazine, I read that Roses must never be put into vases with any other flower. Now, I have often used them with white flowers of a delicate, airy nature, such as the Wild Clematis, or Virgin's Bower, with charming effect. The Clematis gives precisely the unstudied and graceful effect which any vase of flowers should have, because it is its nature to be graceful, and, beautiful as Roses are, as flowers, the habit of the plant, as to branch or stem, is not one calculated to make a group of them quite satisfying by themselves when used in a vase or any dish standing up well from the table. With the Clematis drooping about the vase and trailing on the table, and the Roses lifting their clusters above them, there is nothing finer in the line of decoration. I

have often used bunches of palest Apple blossoms with early Roses with most satisfactory results. Roses and flowering Sumach combine exquisitely. So do Roses and the great clusters of the white flowering Elder. For flat bouquets, or use in bowls, these two are especially useful in connection with each other.

Sweet Peas are the only flowers that I would keep by themselves. I have never felt satisfied with the result when I put anything else in the vase with them. I have a vase which I call my Sweet Pea vase, because it seems so well adapted to show them off to the best advantage that I keep it expressly for them. It is of clear glass, tall and flaming, like a Lily, at the top. I cut my Sweet Peas with long stems, and never attempt to arrange them nicely, for it is a characteristic of this flower that it can never be anything but graceful under any circumstances. Do not cut too many, for they must not be crowded. You want just enough to fill your vase and let them bend about naturally, and they cannot do this if crowded in the least. With just the right quantity they will arrange themselves in a way to delight an artist; all you have to do is to thrust the stems into the water. Some will droop, others remain upright, but the general effect will be airy, graceful, delicate. I lately read an article advising the use of a few sprays of Mignonette with Sweet Peas. Do not do it. The strong fragrance of the Mignonette overpowers the more delicate odor of the Sweet Peas. They are fragrant enough of themselves.

The Gladiolus is a charming flower for use in tall vases. Ferns are the only green things I would use with them. This flower is most effective when kept by itself.

In arranging flowers, one must always bear in mind the laws of harmony among colors in order to produce a satisfactory effect. Scarlet Geraniums and salmon ones do not combine well, but any white flower can be used with the scarlets, and any deep-toned orange or brown flower, like the *Coreopsis*, can be effectively grouped with the salmon varieties of the Geranium. The *Ageratum*, the *Agapanthus*, and the *Plumbago* can be used with charming results with rich yellow flowers or pale pinks, like *Marechal Niel* Roses, or *Master Christine* Geraniums. In ar-

ranging flowers, aim to make them look as much like those growing on their natural stems as possible. Never crowd them and never torture them into shapes or positions nature never put them into. All true art consists in being natural.—R. F. D.

THE YEAR'S WORK.

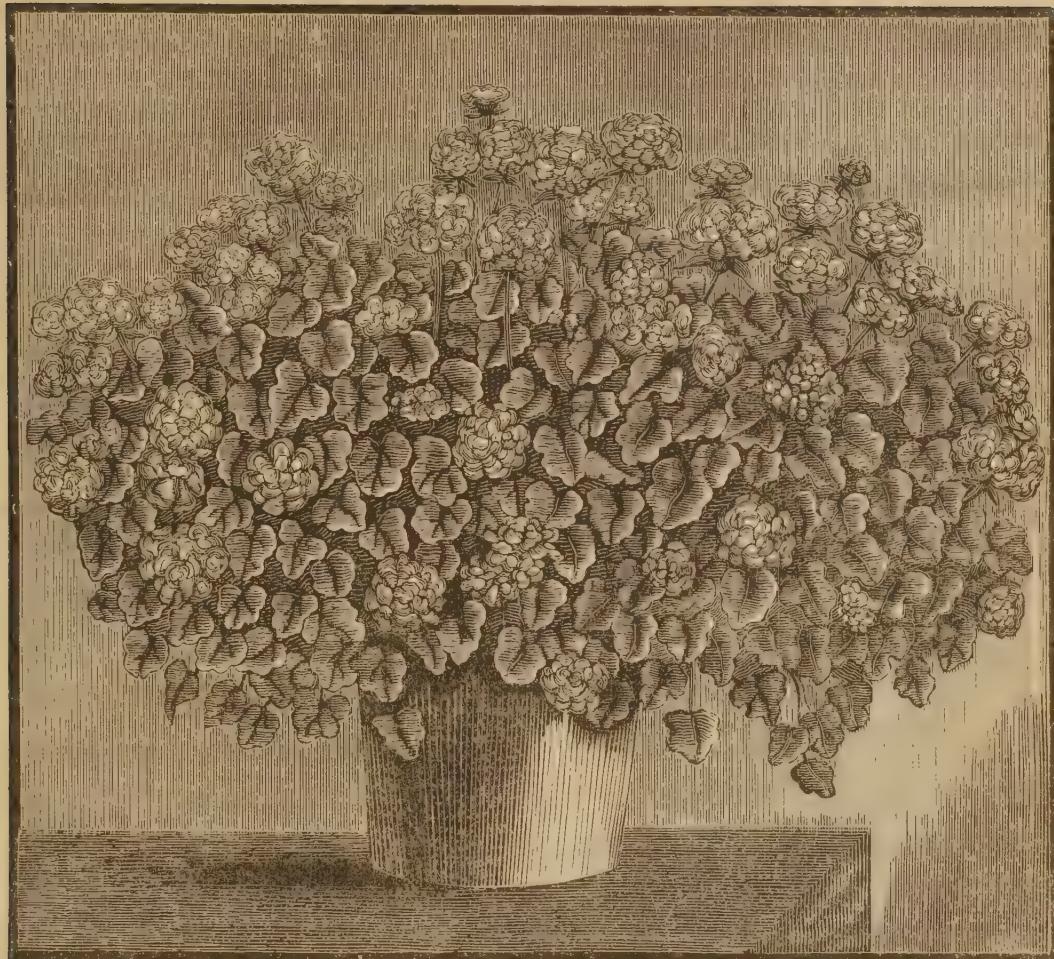
Life consists of the past, the present and the future, and it is only as we ponder and learn of the past that we make the most of the present; only as we live in the present, warned by past failures, shall we shape out a successful future.

Often, in traveling over the mountainous and picturesque scenery of North Wales, when reaching a commanding height, weary and travel-stained, have I taken a rest and looked back and seen all the difficulties of the way beneath me. Possibly, from my vantage ground, I can see a better and easier course, and think, if I had only come that way, I might have avoided such and such obstacles, difficulties and dangers; and so it seems to me it is with life and life-work. The proverb says, "Experience makes fools wise," and if so, how much wiser it ought to make observant, thinking men and women. In nothing is this more forcibly true than in gardening. By observing the conduct and growth of our plants each season, under diverse and ever varying circumstances, we learn the inner workings of their nature; in other words, we understand them and their requirements, and how to treat them intelligently. It may be interesting and profitable at this time to sketch the year's work, and notice what things did well, and what did badly, for our future guidance.

The spring around Toronto was very late, cold and sunless, in short, just the spring to give a gardener the horrors. It was quite the middle of May before fruit trees began to move, and when they did make a start, cold winds and colder rain seemed as if they would keep them forever at a stand still; then, when the bloom opened it rained, and rained, until I began to fear the pollen would all be spoiled and a consequent failure ensue. But, thanks to the great All-Father, I have had an average crop of Apples, Black Currants and Peaches, an abundant crop of Pears, Red and White Currants, (some of the trees so loaded that they had to be

propped up,) Plums, Strawberries, Cherries and Raspberries. This teaches us that a late spring is better for fruit than an early spring and the general sequence of late frosts. Strawberries, I never had finer showing; and the abundance of moisture for the first two months in spring is just what they require to give them the vigor to mature a heavy crop. I managed to carry off the first prize for three dishes, Sharpless, Crescent Seedling and Monarch of the West, even against SMITH, of the Ontario Fruit Farm. But, though fruit was abundant, its enemies were numerous. Vast numbers of Apples and Pears were punctured by the codlin moth, and although I killed hundreds of them in my pupa traps, yet, having neighbors around me with large orchards, who never troubled about them, the pest was always in force. So, also, with the magpie, or pest of the Gooseberry and Currants; I never knew them so troublesome, or, I should say, I never had such troublesome weather in dealing with them, for, no sooner did I get Hellebore shaken over the trees than the rains came, and the floods descended, and washed it all off again; and so with the Paris Green used for the Colorado beetle; I could never get the green fixed dry on the leaves, and it was only by continued patience and perseverance that I kept these pests under. My crop of Grapes under glass was extra fine. Black Hamburgs, as black as Sloes and large as Plums; Buckland Sweetwater, Frontignan and Chasselas, extra, both in bunch, size and finish. Why do people use the syringe so much? I never use it in the vineyard after the buds burst; but by the use of evaporating pans, and dampening down, keep the requisite moisture, and my vines are always clear of insects and mildew, and the Grapes free from dirt, and well finished with rich bloom, which is impossible under the dominion of the syringe.

In flowers, Asters have done remarkably well; I have had some beautiful blooms of Truffaut's Paeony-flowered, and also Dwarf Chrysanthemum, which are my two favorite sorts. What a grand season it has been for the double Alyssum. I had two pyramidal beds of it and Ageratum Mexicanum, mixed with beds of scarlet, orange and purple at the base, and they were very much admired; al-



PRIZE DOUBLE FLOWERED ZONAL PELARGONIUM, THREE AND A HALF FEET IN DIAMETER, AND BEARING NINETY BLOOMING TRUSSES. PREPARED FROM A PHOTOGRAPH.

though the season has been too wet for the Ageratum Tom Thumb, with me growing over twelve inches, and Mexicanum, *ad libitum*. Dianthus has been remarkably fine here, in fact, they were just at home this cool, wet season. Sweet William, Dianthus Hedewigii and *diadematus* were really grand, and in bloom most all summer. Balsams were very good, although they would have done with more heat. I had a row about thirty feet against a background of Norway Spruce, with crimson Iresine and double orange Tagetes in front, edged with Gnaphalium *macrophyllum*, and they were quite a show. Begonias have also done well. I got a packet of seed of the tuberous-rooted varieties, early in spring, and raised about sixty seedlings, and some of them are very fine.

I am surprised that so few grow annual Chrysanthemums, especially in these æsthetic days, for, as a young lady acquaintance of mine says, "they are too, too ut-

terly lovely for anything." What a pretty bed can be made with Chamæpeuce *diacantha*, Achyranthes *versicolor* and Echeverias of sorts; but this season has been too wet and cold for the whole of them, and also for the Sempervivums. Fuchsias have been good with me. I managed to carry off two prizes in July, and I had several specimens six and seven feet high a mass of flower in August, on the lawn, and by their present appearance they will last well into September. Geraniums, owing to the damp, sunless, cold spring, got a small fungus on the foliage, which caused them to have a blotched appearance, consequently I had some trouble to get them up for exhibition in July. As the Geranium is pre-eminently a sun-loving plant, and luxuriates in a dry, hot atmosphere, owing to the rainy season, no sooner had the flowers opened than the centers of the trusses began to decay; but I just managed to carry off a first prize for six double Zonales, and a

first prize for single specimens. One of my specimens was three and a half feet across, and had ninety trusses open at the time of showing. Gladiolus have done well, although they would have been better with more sun; but coming in in August they got sun for flowering, although they had very little in growing. I had some splendid spikes of Brenchleyensis, and also some very beautiful Gandavensis seedlings. Why isn't the Gloxinia more grown? Most people complain of want of heat. Well, I haven't a house where I can command 60° Fahr. in winter, but last year I got a packet of Gloxinia erecta, mixed seed, and sowed them in spring, and rested them during the winter; this year I started them when I could give them heat enough, and in August I had a splendid display, some of the flowers nearly three inches across. I wonder Lantanas are not more grown for mixed borders, they are so beautiful, and one good feature is they can't be cut on account of the unpleasant smell. I had a splendid lot of Heliotrope Forget-me-not; some of the trusses eight inches across, and the air in the evening was laden with their delicate perfume. How provokingly well Lobelia has done; *L. pumila grandiflora*, with me, growing from eight to twelve inches instead of three to six, quite upsetting all my calculations, and reminding me that "the affairs of men and mice gang aft aglee." Marigolds, too, have quite grown out of character, this year; the French and African reaching four feet and over, and a dwarf Tagetes, double orange, that I used to use extensively in England in preference to Calceolarias, its usual height being from six to eight inches, has grown from twelve to fifteen inches; nevertheless, it has been a grand sight, and perfectly clothed with orange the whole season. I consider it the best bedding orange we have, far surpassing any Calceolaria, both in flower and color. Mignonette was also very much at home this wet season, and was a constant source of pleasure to me up to the end of August.

I had a grand crop of Oranges; my large trees in tubs were in bloom in February and March, in the conservatory, and were a perfect sheet of bloom. The perfume in the morning, on entering, was almost overpowering. The fruit set so

thickly that I had to pull scores of them off to give the others a chance to swell. The early part of the year was too sombre and wet for flowering the Petunias. I had grown some specimens three feet across for exhibition, and, do what I would, I couldn't get bloom on them; no sooner had the buds began to swell than they began to damp off, and so I had to take some of my smaller plants, coming in first with six, and second for a collection of cut blooms. Since getting more sun in July and August, I have had them with fifty and sixty blooms open at a time; some of the fringed ones, such as President Garfield, Von Bismarck, Heinrich Heine and Queen Victoria, have been very much admired. I really thought my Portulacas were going to be a failure, as the poor things were looking very forlorn, and couldn't tell what to make of the rain, day after day, and no sun; but in August they were a perfect blaze. I had sown my vine border all over with them, and you may conceive the dazzling brilliance of color when the sun shone; to describe it is impossible. Schizanthus, although it likes plenty of heat and sun to flower, likes also plenty of moisture and not too much heat to grow, and so it has been a poor season for this plant, its unique, Orchis-like flowers being very beautiful. By the way, few people know what a charming pot plant it makes, two or three in a pot, and trained round a trellis; if seed is sown in January the plants will flower beautifully in April and May. Saponaria likes a warm, sandy soil, and where it got that it would be lovely, this year, as it loves moisture to start growth and heat to flower.

Sedums, strange to say, although I have frequently found them in mountains, growing and luxuriating almost on bare rock, yet in my wet, strong clay loam have done splendidly. I planted some hundreds of feet of *Sedum glaucum* for edgings to walks, in the spring, and they made beautiful verges about a foot wide, requiring no mowing and no attention. I have also used *Sedum Anglicum*, *Gibraltarium*, and *Lydium*, in carpet bedding. My Solanums I cut down in spring, and as soon as they started growth I planted them out in a spare border, and by August they were perfectly loaded with their beautiful berries, which will be

brilliant till spring. Stocks have been grand, although they would have been better on a lighter and better drained sub-soil. I had a line of King of Tom Thumb Nasturtiums, this year, but they didn't make much progress till the warm, dry weather in August; from that time they were everything I could wish, as they gave a grand mass of crimson, which, against their bluish-gray foliage, glows with intense brilliance. It has been a good year for Verbenas on open sub-soils, but with me they have really been a failure; however, as I had a magnificent lot of Phlox Drummondii grandiflora, I didn't miss them so much. I have had a splendid lot of Spiræas, which seemed to luxuriate in the moist weather. The Wistaria, with me, was grand in spring. Roses also did well. I had some splendid specimens of Weigela amabilis and florida, as also Syringas, Lilacs and Snowballs.

In vegetables, Asparagus, though late, was fine. Beets almost too large. Beans, Broad and Bush, I have had enormous crops; the Butter Bean from July up to the frost. Brussels Sprouts, splendid stools, three feet and three and a half feet high, clothed with sprouts. Cabbage good; Henderson's Early I commenced cutting early in July, and had an abundance all through the summer. Carrots were splendid.

I always like to get my seed in early of all my crops, and I do not think I ever had better crops than this wet season; although myriad-footed rain beat the ground hard, I had it hoed whenever it could be worked, and so kept the surface not only free from weeds but also open and porous. I had also some very fine heads of Henderson's Snowball Cauliflower and Imported Erfurt, which is pretty much the same thing. I had some very large Lenormand's in the fall. My Celery was planted in the lowest part of my garden, and most of it was under water for some time, but it came out splendidly. I had Mammoth Sweet Corn over twelve feet high, and all my Corn has yielded well. With Cucumbers I was a month late, but when they did begin they were very fine. I like Telegraph, as it is a good cropper, and not too long, and White Spine, and Gherkin for pickling. I planted Leeks the same as Celery, and they were under

water for quite a while, and were earthed up as the Celery, and make a splendid winter vegetable. Lettuce I have had in abundance, although they had a tendency to go to seed during the dry spell in August. I thought my Melons were going to fail me, but when the heat came they were all right. Onions have been grand, and as large as the reputed Spanish, six, seven and eight inches in diameter. The sorts I raise are Blood Red, Danvers Yellow, Early Queen, Wethersfield Red, White Globe and White Portugal. Parsnips got about three feet high and have splendid roots. Parsley is good. My Peas were the little American Wonder and Kentish Invicta for the first crop, followed by the McLean's Advancer, Fill-basket, Culverwell, Telegraph and Veitch's Perfection. British Queen gave me Peas all the season. Potatoes, alas! alas! I must write failure; too wet at first to make tubers, and then the disease seized the haulm and spread down to the roots, and we take up beautiful roots with perhaps one sound Potato and eight or ten rotten ones. Salsify is grand, and so is Scorzonera. I had Spinach all the season. Squash were very fine and in plenty. Tomatoes grew all to wood and I had to cut them pretty severely two or three times, hence they were late, but very fine. I sowed Nimble Dick Turnip very early, and had some very good ones in June and July; then in June I sowed Boston Market Swede and Market Gardeners' Favorite, and in the beginning of August, Sharpless, Golden Ball and Six Weeks, and so had plenty for winter.

By taking notice of what has done well in the wet season we may be assured that in a dry spring they will want well watering and mulching, and what has done badly we would advise planting on drier or higher ground if a wet season should be anticipated. Then, we learn on looking back, how to prepare for the future, how to guard against failures, or, at least, how to modify the effects of untoward seasons, and so by patience and perseverance earn the name of successful gardeners.—Wm. Hy. WADDINGTON.

MASSING PLANTS.—I reset my herbaceous plants, last fall; they had been here and there, and one in a place, but now I have each kind by itself, and I like the change.—W., *Cleveland, Ohio.*

MY PLANT-STAND.

I have a plant-stand which affords me more satisfaction than any thing else of the kind that I have ever been possessor of. I want to tell the readers of the MAGAZINE about it, and possibly some of them may act on my suggestions and be pleased with the results.

In my study, I have a long, or, perhaps I should say, a wide window; a window made up of three ordinary ones placed together, only being separated from each other by the width of the casing between. I keep plants here in the winter, and some time ago I began to think about what kind of a stand would answer my purpose best. I do not like stands having shelves, for, if you have the shelves turning away from the window, the plants on the lower ones will not get light enough. If you turn the shelves to the window, your plants get light enough, but those on the lower tiers are hidden from you by the plants on the top, and the back of the stand is unsightly. So I decided on having a flat stand, or table. I sent to the cabinet-maker's and had one made. The bottom is of ash, with turned legs, well braced, and is about eighteen inches wide by six feet long. The top is about two and a half feet wide by eight feet in length. Around the edge of the table is a strip of ash two inches in depth. Before doing anything to the table in the way of making it useful, it was oiled well. Two coats of linseed oil, well rubbed in, and finished with a coat of wax melted in turpentine, gave it a fine finish. Then the inside of the top was painted thoroughly to make it water tight. When the paint was dry, I fastened to the strip running around the table, a trellis about eight deep, made of slats of Black Walnut, oiled and fastened together in lattice fashion, a little brass-headed nail holding the strips together wherever they cross each other. When this was done my table was ready for use. I put sand on it to the depth of an inch, to absorb the water which draws through the pots very frequently, and to give off moisture.

I placed pots of Ivy at the sides, and trained the branches along the trellis I have described, thus making a very ornamental frame for the plants my table was to hold. This trellis, with its vines, makes all pot-covers unnecessary, as it

conceals the pots quite effectually. At the corners I placed pots containing *Pilogyne suavis*, one of our very best new climbers, and *Madeira Vine*, an old standby among plants for climbing purposes in the house. I had these pots connected with each other by wire arches, reaching to the top of the window, and these arches were connected with each other at the corners, thus making them stout and firm. Overhead, from side to side, I fastened cords. These arches are now covered with vines, and in a short time my window garden will be roofed in by them. The effect is very pleasing. In the middle of the table, in a tall vase, I have a fine specimen of *Dracæna*, and about it are grouped some large *Geraniums*, in full bloom. I have *Salvia splendens* and *patens*; *Begonias rubra*, *Weltoniensis*, and *picta*; *Chinese Primroses*, *Jasmine*, *Ageratum*, *Pyrethrum*, *Coleus* and *Callas* occupying positions suitable to their style and habit, on my table, and from these collections I expect flowers all winter. Every day I syringe them, and about once a week I evaporate tobacco water among them. I have seen no *aphis* or spider as yet, but I always believe in the "ounce of prevention" theory in the cultivation of plants, and I think it best to guard against insects getting a foothold. It is easy to keep them away, but not so easy to get rid of them after they have established themselves.

My table is on castors, so that it can be wheeled out into the room on cold nights. If desirable, it can be turned around, thus giving the plants light on all sides without turning each pot. I keep the sand on which the pots stand wet all the time, so that there is a steady evaporation going on, which is very conducive to the healthy growth of the plants. If any one takes pattern by my table, and has no *Ivies* to train about the lower part of it, there are several trailing plants which can be used for the purpose. *Petunias* would answer very well, and to their foliage would add the beauty of their flowers. *German Ivy* grows rapidly, and would soon cover the trellis. It is a very pretty vine for training up the arches, but I prefer *Pilogyne* or *Madeira Vine* because their leaves are borne more closely on the branches, and their drooping stems are more graceful than the *Ivy*,

which has rather a stiff habit. Either of these could be trained along the trellis, but English Ivy is best of all for use here, if it can be had, for it will not care particularly if it does not get the sun, and whatever plant is used on the trellis will be in shade on the side of the table away from the window. To give sunshine to this side it would be well to turn the tables once a week, especially if any other plant than the English Ivy is used on the trellis. I am confident that any one making a table like mine will be pleased with it, for it has a substantial and at the same time airy effect, because of the dispositions made of the vines at the corners.—EBEN E. REXFORD.

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GAURA LINDHEIMERI.

I presume but a very few of those who will read this paper are acquainted with the plant I am about to describe. It is a plant found in a few collections only, as it is one of those that are termed "old-fashioned;" but, be this as it may, it will always attract attention, for it is, when well grown, a very pretty plant, although the cut flowers cannot be used to much advantage. *Gaura Lindheimeri* is an exceedingly handsome, free-flowering, greenhouse perennial plant, of a somewhat herbaceous character, belonging to the natural order Onagraceæ. It is a native of Texas, and is a plant of branching habit, growing from three to four feet in height; the lower lanceolate leaves being deeply divided in a pinnatifid manner, the others being slightly toothed, while the upper ones are entire. The flowers are produced on long, slender spikes, which branch near the end; the spikes are also much lacking in leaves, except near their extremities where their flowers are produced. When the flower buds first appear they are long and slender and of a greenish hue; soon they gradually increase in size and change to a reddish-brown color, just before they expand. When fully expanded the flowers bear a striking resemblance to some species of butterflies, the pure white petals having a white calyx. Although a plant of straggling habit, it is really very showy and useful for bedding, and is well adapted for growing as a single specimen in the mixed border, where its peculiarly formed flowers always attract attention. It will grow well in any good, rich gar-

den soil, if given a sunny situation. I necessary, support the plants by neat stakes. On the approach of frost a few plants should be taken up carefully, cut back, and potted in suitable sized pots; drain the pots well and use ordinary potting soil. Or a few plants can be retained in small pots, and plunged in the open air during the summer. If these plants are taken up and repotted into pots of a larger size, early in September, they will flower nicely the ensuing spring, if given a warm, sunny position. During the winter a temperature of from 45° to 48° is amply sufficient. Propagation is effected by cuttings of the half ripened wood placed in sand, in gentle heat, early in March. When rooted, pot off into three-inch pots, and keep growing until the end of April, then gradually harden off, and plant out when all danger of frost is over. Or seeds can be sown in a well drained pot of light, sandy soil, and placed in a moist, light, warm situation. As soon as the young plants are strong enough to handle, remove to three-inch pots and treat as above advised. But unless the seeds are sown early in the season, say January or February, they will not flower, so, in most cases, cuttings are to be preferred. It may be well for me to mention the fact that, although I grow some thirty or more plants every season, I have never seen a seed vessel on any of them. I have not, as yet, seen the plant mentioned in any of our floral catalogues, but seed can be obtained at a very moderate price of any of our seedsmen.—CHAS. E. PARNELL, *Queens, L. I.*

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LIVING FROM THE GARDEN.

Gardeners, and above all farmers, have no business to live meanly, or to think of themselves as obliged to drudge ceaselessly without the indulgencies of other classes. One has no business to see town folk having early vegetables and berries a month before his tardy supply comes on, to be out of them in dog-days before the merchants and cheap boarding-house keepers in the city have begun to see the end of fresh things, he has no need to live on doughnuts and boiled dinners the year round, when others try the changes of spring lamb, fresh fish, broiled chicken, salads, ducks and green Peas, capons and veal till turkey time comes again. He ought not to

see town homes fragrant with flowers while his wife has only a bunch of Syringa and Cinnamon Roses, with a tuft of Asparagus to sweeten her parlor when she thinks to pick them. What better right have rich men to sit over desserts of choice Pears, Plums, Grapes and Apricots, while he must content himself with a Baldwin Apple in midwinter? Who should have a becoming home with its lawn in front, and wide borders of the richest flowers; his house, one story and small, perhaps, yet hung with Woodbine, wild Grapes and Roses against the background of orchard and nut trees, spreading their flanking boughs with as good effect as if it were a cottage ornée, with its acres of shrubberies. Why should he not have in his garden choice of fruit for the season, Strawberries, Currants and Gooseberries jostling each other in earliest perfection, red and black Cherries, golden and purple Plums, plenty of Black-Caps to make up for the lost Strawberries, and Grapes as soon as Raspberries are over, big blanched salads and Peas in succession, as well as his town neighbor who sells him groceries and cotton? Why should he not have as fine Pears and Peaches, Winter Apples and Grapes at Christmas as well as the President of the Horticultural Society, and why should not his girls have big French Roses and Tuberoses as well as the solitary Dahlia and China Aster, which decorate the yard, and the common Geranium indoors? Why doesn't he have a herb bed to make his plain dinner savory, and Lavender to sweeten his sheets at night? A poor English cottager will have all these by thrift and contrivance. Why not an American farmer? He has land enough, and must have a grass field. Why not put it in front of his house instead of behind it, and instead of making his Cabbages and Potatoes the main features of the place, why not screen them from the road and from sight by a belt of choice fruit trees, and have trees to shelter his cattle outside the barn fence, shutting off all that is unsightly? Why doesn't he raise plenty of fowls, pigeons, and a sheep or two on his lawn, to supply his table, to find fertilizer for the pinning garden, and yield his wife pin money, instead of paying so much to the butcher and buying salt fish by the box? Plants cost money, do they? Your wife spends

enough for baking powder weekly to buy a fine tree or choice Rose; instead of making good yeast bread, as her folks did. She buys a shilling's worth of cheap edgings for the pinnafores instead of making neat hemmed ruffles, and spoils more cretonne and red canton flannel with bad fancy work than would stock a garden year by year. Then the children must have their five and ten cents worth of candy every time one goes to the store, when fruit would be much better for them, and the money would buy flowers and flower seeds. You might have enough to stock the garden, buying groceries by the month's supply, instead of from hand to mouth, or by taking care of the tools and things you have, so as not to pay so much for repairs. I won't say any thing about the fireworks you subscribed for election night, or the excursion that gave your wife a sick headache the week after, nor the jig-saw or card printing-press you must buy for your hopeful, because the other boys each have one and you are tired of his teasing. Nor of the horse you lost by leaving him sweating at the grocery door, one cold day, while you stopped to just get a pound of soda, and hear what all the loungers had to say. Of course, you can't have anything like the rest of folks, it is not in nature, your own nature, that you should.—SUSAN POWER.

ICE ON TREES.

At one of the winter meetings of the Dayton Club, Mr. OHMER said that he had found no bad effect from the twigs and buds being encased in ice, unless the weight became so great as to actually break them. Another member thought that if the sun came out on shoots in that condition, it would cause injury. He was, perhaps, thinking of the ice acting as a lens, but if it should, the focus of concentration would not be within the ice. The truth is, that a branch of any hardy tree would keep in the best condition if encased in ice the winter through, and branches of a Peach tree lying on a shaded shed roof, buried in frozen snow sludge which had drifted and lain there, blossomed and bore well when the other branches of the same tree, and all other trees around, had their blossom buds killed.—W.



THE APPLE IN ENGLAND.

The late English journals are filled with the news of the great Apple Exhibition lately held at Chiswick. The names of exhibitors and of the specimens shown are given and often with somewhat detailed descriptions. These are from all parts of England, Scotland, Wales, and the Island of Jersey. We should judge from the accounts that the showing was a grand one. The *Journal of Horticulture* speaks of it as "a gathering that has astonished the promoters by its magnitude, and rendered the labors of the scrutineers even more onerous and difficult than was expected. There is much to be learned in connection with this important fruit, and those who have the most intimate acquaintance with it will be the first to admit this." Particular note is made of the same varieties grafted on different stocks, that is, on old trees of several varieties, whereby it appears that the amount of fruit and the quality vary greatly with the stock.

"Duchess of Oldenburg grafted on the Early Strawberry, a tree nearly dead with canker, revived the tree, which now makes vigorous growth, the fruit growing to a very large size, coloring beautifully, and ripening fully three weeks earlier than is usual with this variety.

"Duchess of Oldenburg grafted on the Golden Winter Pearmain makes very thin wood, but appears healthy. The fruit is small and of a pale green color.

"Duchess of Oldenburg grafted on Reinette Van Mons makes very little growth, the fruit being hard and much smaller than the above, but very handsome in appearance.

"These results are very suggestive. If the ripening of an early Apple, such as the Duchess of Oldenburg, can be accelerated by three weeks, the fruit being

also large and beautifully colored, that is an important point gained, and the same stock is worthy of being tried for other early dessert Apples, such as Mr. Gladstone, also kitchen Apples, and, if the results are equally satisfactory, we shall be closely approaching the desideratum of having Apples all the year round.

"That soil and climate influence the coloring of Apples is beyond question. The examples now on view from widely separated districts show this conclusively. From Kent, Middlesex, Monmouthshire, Dorsetshire and Devonshire we find highly colored fruit, whereas the same varieties from Lincolnshire, Staffordshire, Yorkshire and Durham are practically colorless. This is only what might be expected; but few persons would anticipate that Duchess of Oldenburg grafted on Golden Winter Pearmain should not color at all, while on the Reinette Van Mons the fruit should be so handsome, nor that exactly the same phenomena should occur with Cox's Pomona worked on the same stocks, especially as Reinette Van Mons is not itself highly colored. It is quite clear there is something to be learned on the question of stocks, and it is equally certain that much knowledge on varieties can be gained by an inspection of the eight thousand dishes or more of fruit in the marvelous collection at Chiswick. It is a grand museum of Apples and most instructive, especially as the correct and erroneous names are attached to the dishes where corrections were necessary. It affords such an opportunity for the study of the Apple as has never been seen before, and is not likely to occur again."

The grand crop of Apples in Great Britain was the occasion of the revival of interest in this noble fruit, and it is to be

hoped that the present season may be the commencement of a new era of the Apple culture in that country.

SAMPLES OF WOOD.

Baron von MUELLER, of the Botanic Gardens, Melbourne, Australia; writes as follows to the *Gardeners' Chronicle* relative to specimens of wood for permanent collections: "I beg to send you a pattern of wood in book form. So far as I am aware the first wood books were designed by myself for the London Exhibition of 1862, but I adopted for the imitation books then a case form; this being somewhat expensive, and the wood apt to warp, I have for the exhibitions of Amsterdam and Calcutta used the wood in solid pieces, such as you see now, the sizes adopted as a standard being seven, by four and a half inches, by one and one-quarter inch. The sides and back show the wood in a polished state, but the marginal portion (corresponding to the leaves of a book) is left simply planed, so as to show the wood in an unpolished state. As the book's title gives the scientific name of the wood represented, and its native countries, any "wood libraries" could be arranged either geographically or systematically, or, better still, two collections could be made. I know of no other form to exhibit woods in an equally handy and elegant way, and if great museums were gradually to gather up all accessible sorts of wood from the about sixteen thousand different trees of the world, most instructive collections would be brought together. For this purpose, however, and for facilitating extensive interchanges, some standard size ought to be adopted, and the present is suggested. Woods too small for books can be used for a variety of turnery—rulers, handles, little implements and utensils, according to fitness—a method carried out for the Amsterdam and Calcutta exhibitions, each article carrying an elegant label setting forth the name of the tree or shrub, and its nativity."

A VALUABLE PLANT.—At a recent sale of plants, in London, a certain Orchid was purchased by Sir TREVOR LAWRENCE, after a spirited competition, at £246, 15s, which is nearly \$1200. There can be no better indication of the horticultural interest among the wealthy class of England.

TEA ROSE, ADAM.

A writer in *The Garden* considers the Tea Rose, Adam, "one of the most useful Roses in cultivation," and gives his experience with it in connection with other kinds. "All the kinds planted there did well, and gave a large amount of bloom, but there were periods when they were out of bloom with the exception of Adam, which always furnished a bud or two in times of need, and often caused the remark to be made that it was worth all the other varieties put together. It is, however, only fair to say that that favorite of the market growers, Nipheta, did not have a place there, but although Adam scarcely ranks so high as that popular kind, it comes next to it, and the two should always be found in company, forming, as they do, a good contrast as regards color. I cannot think of two better kinds for a small greenhouse than these two Teas. Speaking of Tea Roses the other day to a friend, a large trade grower of them, he confirmed my good opinion of Adam, but considers it to be quite distinct from President."

The best authorities in this country consider Adam and President to be the same variety. If this is not the case then both varieties are probably not known here, for the late HENRY B. ELLWANGER, who had unsurpassed opportunities of forming a correct opinion in regard to this question, considered the name, President, to be a synonym of Adam.

PRESERVING TROPICAL FRUITS.

The *Queensland Planter and Farmer* says: "A very novel and interesting industry has been started in the South Seas by an American firm—THE DRYING AND PRESERVATION OF LOCAL-GROWN FRUIT. The process used is called the Alden process, of which we have no details. The firm has fifty acres or more of Bananas under cultivation, and intend also to buy from outside planters. The Bananas are first thrown into boiling syrup, and then subjected to the drying process, the sugar crystallising upon the fruit and imparting a delicious flavor. If this plan of utilising this most nutritive and wholesome of fruits could be introduced into Queensland, thousands of acres might be grown for export, and the industry become most lucrative."



A BASKET OF CUT FLOWERS.

Much better work in the arrangement of cut flowers is done by professional florists now than even a few years since; still, there is yet altogether too much of the old time stiffness in floral work displayed to-day. It is evidently hard to leave the old and accustomed method in which the older florists have been trained. Double flowers set compactly in lines, and in other positions, with mathematical precision, no longer appeal to our educated sense of the beautiful,

and we turn from such a display with relief to the most artlessly grouped bouquet in the child's hand, just gathered in its rambles. Our younger florists, we are pleased to say, are breaking away from the old conventional styles of work, and often give us gems of art. The engraving above shows a basket with three stages filled with cut flowers, Ferns and foliage that was awarded a silver medal at a German exhibition, the past season. It may serve as a model of artistic arrangement.

STORMS.

"Veronica" writes in *The Garden* that "We are, perhaps, a little too apt to look upon storms and hurricanes rather in the light of enemies than as friends, as they undoubtedly are. Some wicked old cynic once said that if we only knew the real worth or value that our enemies were to us we should make more of them; and perhaps it is true also of wind storms which injure us most, because they visit us so very seldom. Amid the creaking of branches and the crash of fallen trunks we are perhaps too apt to look on wind as a destroyer rather than as the strengthener which it undoubtedly is. When east winds blow during the spring time vegetation seems at a standstill. I say seems at a standstill, for in reality it is not so; the root fibres are most active, and the top growth of leaves and flowers is eventually all the better for the invigorating breeze. In root-growing districts the old farmers (who, in their own way, are the most observant of men) will tell you that Turnips and Mangolds never bulb until a strong wind or two has swept over them, and so also, no doubt, we owe many fine trees to the exhilarating action of high wind, for after all it is but few, and those mainly the old and decrepid, which fall under its sway."

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A JAPANESE FERN.

A correspondent of the *Gardeners' Chronicle* writes to that journal from Japan in regard to a native Fern of that country, *Davallia Mariesii*, in the following language: "This *Davallia* is one of the hardiest and most useful Ferns we have; it grows in this district on the bare rocks, exposed to the full glare of the sun in the hot weather, and to all the inclemency of the weather in the cold season. It is not, therefore, to be wondered at that after it has lent itself to be trained into all sorts of fanciful forms by the natives, it should grow luxuriantly when a little care and attention is given it." The editor remarks, "Experiments during the last year prove that the plant is as useful in this country as in Japan; it appears to thrive equally well in stove, greenhouse, dwelling house, or outside windows or verandas. Plant growers are always on the lookout for having plants which do no not require much attention, and here they have the very thing they seek."

EUCHARIS.

A correspondent of the *Gardeners' Chronicle* says: "I see that the cultivation of these, the finest of all bulbous flowering stove plants, is attracting some attention among your correspondents. This is not to be wondered at when we consider how useful and beautiful they are, adapted either for joyful or mournful occasions—appropriate for the bride's bouquet or the funeral wreath. My own experience of their cultivation and treatment is that when the bulbs attain a good size they may be made to flower at any season—in sunny June or dull December. We flower them thrice yearly at least; as soon as a batch of them flower in the stove we bring them into a viney we have 10° to 15° cooler. Here we rest them two or three months, not letting them lose the foliage, and then bring to the stove again as we require them, give them plenty of heat and water, and we have them soon in bloom again."

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WHITE CELERY.

A new and remarkable variety of Celery has been obtained by a gardener by the name of CHEMIN, at Issy, France. According to the *Revue Horticole* the particular merit of this variety is that its heart, or center, is naturally white, and consequently no labor is required to blanch it. It is only necessary to raise the plants to their full development, and they are then ready for market, without earthing up or using any means for blanching. The quality is said to be excellent, and it is thought that Chemin's Celery, or White Celery, by both of which names it is known, will soon supersede the other well known varieties now cultivated. The color is described as yellowish white. "Not only," says the journal above quoted, "is this Celery very handsome in appearance, but it is also very good, very full, very tender, savory and very agreeable to eat. It is, then, a veritable revolution, at the same time a peaceful one, which has produced Chemin's Celery. Let us add," it continues, "that it is vigorous and relatively early. As to its culture, it is absolutely the same, less the blanching, as that applied to all other varieties of Celery." The seed of this variety will be offered, next season, in this country, under the name of White Plume.



PLEASANT GOSSIP.

FLOWERS IN SCHOOL GROUNDS.

Since the first of November we have received many letters from teachers who availed themselves of our offer for flower seeds to sow in the school grounds. With few exceptions these reports indicate fair success in the cultivation of the plants in a very unfavorable season. That the raising of flowers on the school grounds is interesting, and productive of excellent effects on the pupils and teachers, the testimony is unanimous, and accordingly we could give extracts from numerous letters, but the whole subject seems to be so well shown in two pleasantly written letters, lately received, we give them in full, without others.

I am a teacher of one of the many schools that availed themselves of your kind offer of flower seeds with which to make our school grounds bright and pretty. Our school house is situated in one corner of a pasture, but our school board promised to fence it for us; so we sent for the seeds, rejoiced when they came, planned where to make our beds, sowed some in boxes in the deep windows, and watched their tiny leaves unfold, and waited for the looked-for fence, which should keep the frolicsome colts and inquisitive "bossy" away from our domain. Alas, the fathers of the district at last assured us that there was "no money to build a fence," and we must get along another year without it. There was much lamentation, but the flowers already started were distributed among the children, and the teacher took the rest of the seeds and planted them in her own garden, and told the children that when she wrote to Mr. Vick she would send him the price of them, and tell him all about it, and that he would not blame them any. So, here is the letter and the money; and if I could only show you some of the lovely flowers I raised I should be so glad. The Balsams were the prettiest I ever saw, and I might easily have obtained the premium at our county fair on Zinnias and Phloxes. My little sister counted forty varieties of Phlox, and now they, with the Petunias, Pansies and Pinks, make a lovely showing. The Asters, Cockscombs and Sweet Peas held on bravely until our first frost, the 14th of October, when their beauty vanished.

We are hoping to have our school ground fenced some time, and then to make our "temple of knowledge" as pretty outside as inside. I had a year's numbers of your MAGAZINE in my school room for

two months, and the children considered it a great favor to take it for a while, and never seemed to tire of looking at the pretty pictures.—L. E. L., Kansas.

I write to make a report of my gardening in the school grounds. My success will seem very doubtful to you, but still it was success to me. Let me tell you the circumstances. After an illness of seven years, which has left me a mere wreck going on crutches, I concluded I could venture in the school room once more. I could not have my choice of schools, but had to select one with a boarding place close by, as I can only walk a few rods. I found one, the grounds of which joined a farmer's yard, where they consented to board me. So, leaving my Post Office with a neighbor, I prepared to return to the field of labor which had filled ten of the best years of my life. The school had the worst reputation of any in the county. The people felt a little doubtful of my success, as they had employed a lady for the winter term, and she had literally to fight her way through, and sometimes went home from the fray with hands bleeding, the result of attempts to see who should be mistress, or master, of the situation. And, to add to the pleasantness of my position, I fell and sprained an ankle a week before my school commenced, so, physically, I was nothing—just could manage to creep to the school house and sit in my chair, with my foot resting on a cushion. All this, so you will see how the flowers helped me, otherwise I should not mention it. I had fifty-six scholars on the roll, from thirty to forty-eight in attendance, ranging from five to fifteen years. I soon found there would be no trouble in the room. The danger lay outside. In a country school where they all bring luncheon, the hour's nooning is a prolific cause of contention. I had said, "you must not do this," "you must not do that," until I became both weary and ashamed of the iteration. But what to tell them to do was the question. I guess an angel whispered to me, "send to Vick; let him help you." I seized on the inspiration and wrote immediately. Then I told them of your proposition, and asked who would help. All hands were raised instantly, and such beaming faces and sparkling eyes I never saw; how delighted they all were, how eager, how excited. They went to work with a will. The boys cleaned the yard, mended the fence, and prepared the beds; the girls assisting in all things and planting the seeds. The school was all interest and animation. It was, "Teacher, mayn't I do this?" or, "can't I plant some seeds?" and one little grieved voice, saying, sadly, "Teacher, I haven't got to do a thing, except to clear away those sticks of wood!" There was no time for tripping up the little boys, frightening the girls, or tearing each other's clothes in a friendly scuffle. I can only leave you to imagine how the gift of the seeds helped the school, I cannot tell you.

I am sorry to say that, as far as raising flowers is concerned, I cannot report a complete success. The children knew absolutely nothing of the requirements of the seeds. Mere telling could not teach them, and I was not able to do anything, nor even to oversee them as I should like to have done. Then the rains were incessant. The school house is one mile and a half from Grand River. The river was out of the banks two weeks within a quarter of a mile of the school house, and though it did not touch us the constant rain injured the flowers. Some of the seeds were entirely washed away. The Sweet Peas never bloomed, but the Phlox, Zinnias, Cockscombs, Petunias, Portulacas and Candytuft did nobly. I have not been back since school closed, but they told me the flowers were quite an attraction to the scholars attending Sabbath school, which was held at the school house. One of the scholars brought me a bouquet from the yard, some time ago, and the flowers were still nice. I counted seven different colors of Zinnias and nine of Phlox in it. Taking everything into consideration, I am not discouraged. The seeds did their part, and if the Lord grants me strength, I will try to do more next summer, when I expect to apply to you again, if I am left here so long. Thanking you for your liberality and assuring you it was appreciated.—M. E. W., Missouri.

As will be seen on another page, seeds will be supplied free to schools for 1884, with the same conditions they were this year, and we hope the orders will come from all parts of the country.

SOME QUESTIONS.

I like your MAGAZINE very much. I see other subscribers ask questions concerning their plants, and I feel to do the same. I have a plant called *Camellia Japonica*, which I raised from a tiny slip; it is three years old. It is a hard-wooded shrub, handsome as can be. It has never blossomed; the leaves turn yellowish white and drop off. Please tell me how to treat it; also, how to treat the *Sword Cactus* and the *Night Blooming Cereus*; both are slips. How old must they be before they blossom?—MRS. C. F. B., *Ashby, Mass.*

Our inquirer must wake up to the fact that the plant here called *Camellia* is not a *Camellia*, but is *Euonymus Japonica*. Many times in our pages have we been obliged to make a similar statement. From all parts of the country and for several years similar inquiries have come, and specimen pieces of the plant have been sent, as in this case. How this plant could become so widely disseminated under a false name we do not know. It almost appears as if it had been intentionally sent out mis-named, yet we have never heard so. It is a handsome plant, and one far more easily raised than *Camellia Japonica*, and consequently, a much cheaper plant. Its flowers, however, are not showy, and it is prized only for its fine form and the beauty of its leaves. The leaves turn

yellow and drop off, because the warm, dry house air is unsuited to it; it is naturally an evergreen plant, and if kept in a moderately cool and moist atmosphere it will retain its leaves continuously. The young *Cactus* plant mentioned should be allowed to rest by being kept in a rather warm and dry place until the latter part of winter; then give it more water and encourage its growth.

WHITE WORMS IN SOIL.

I have noticed for a long time in the dirt of my house plants some little white worms; do not know what the name for it would be. Can see them mostly when I water the plants. They are so many and so small I cannot describe them, only being clear white, and appear to have two long horns at the head; will crawl around very quickly. Please tell me in your next MAGAZINE what they are, and if they are harmful to the plants, and what will destroy them.—R. A. R., *Blue Mound, Wis.*

This subject was discussed in our last volume, and an effectual means of destroying the pests was stated to be thrusting two or three common matches into the soil of the pot through the drain hole. The phosphorous of the matches is the destructive agent, but it is harmless to the plants.

WISTARIA NOT BLOOMING.

As I have a *Wistaria* vine four years old that has never given any blooms, and kills down every winter unless covered, I would like you to advise me what to do with it. Last winter, I laid it down and covered it with old chips and vines from the flower garden; it grew splendidly this summer, but did not bloom.—MRS. W. F. D., *Union, Oregon.*

If the vine is protected every year, and makes its growth and remains healthy, it will bloom in time. This plant frequently requires several years to bloom after planting. In this case, however, we fear it is in a climate where its life will be too much of a struggle. It should be protected every winter, and perhaps in time it may become vigorous enough to take care of itself.

BEDDING PLANTS FROM SEED.

Please tell me in your next MAGAZINE whether *Coleus* and *Abutilons* and *Centaureas* and *Cineraria maritima*, grown from seed will not do for bedding the following summer, and what time the seed ought to be sowed?—F. D., *Kellerton, Iowa.*

Seeds of the plants mentioned, if sowed in February, should produce plants, which, if properly cared for, will be ready to bed out for the summer.

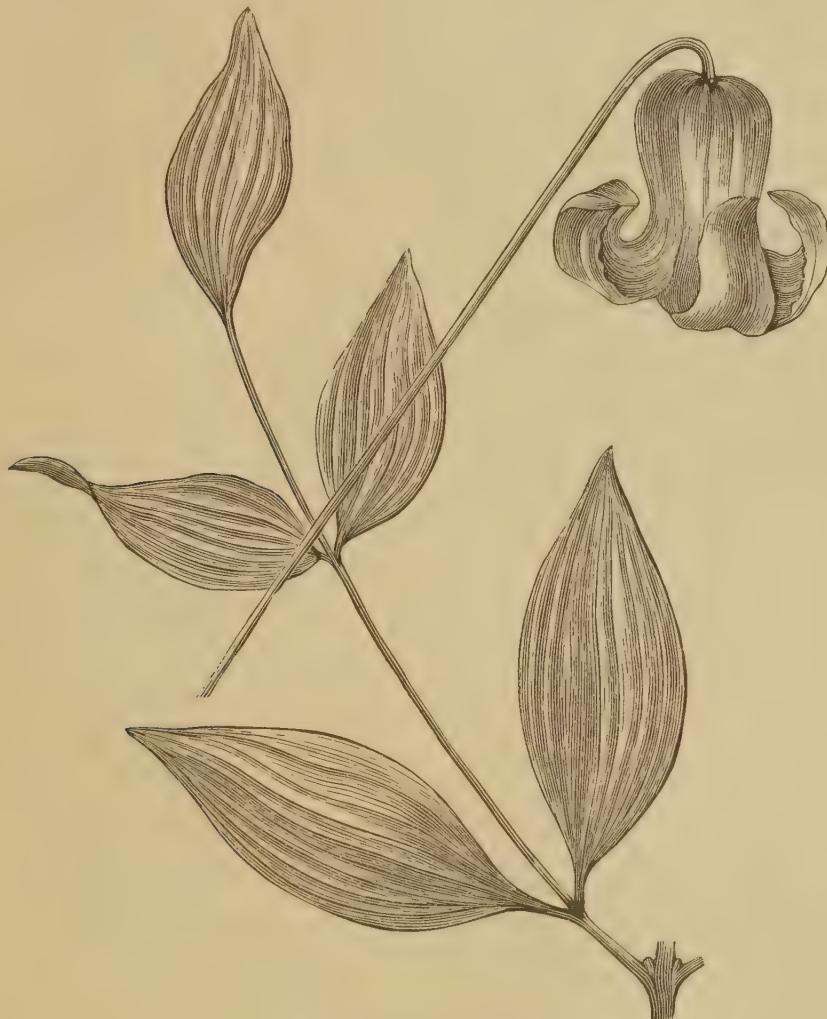
A GRACEFUL CLEMATIS.

With a handsome specimen of Clematis, from which the accompanying engraving was made, we received, in August, the following note :

The Clematis, of which I send you a sprig and flower, was first brought to this place about seven years ago. Mr. N. C. NEWELL was the owner of the only plant in this section until quite recently, and now there are but two or three. The plant is herba-

Examination soon showed that this was one of our native species of Clematis, though a strange one to us at the north. The following is the description of it given by Jos. F. JAMES, in his " Revision of the genus Clematis :"

" *Clematis crispa*, LINN. Stem smooth, climbing; leaves pinnate or ternate; leaflets three to fifteen, acute, thin, varying



CLEMATIS CRISPA.

ceous, the stems dying to the ground each winter. The vines grow to the height of eight or ten feet, and the leaves are of a rich, dark green, forming a fine background for the light lavender-purple flowers, which are all bell-shaped, about one and one-half inches long, borne on single long stems, very abundantly during July and until quite late in the season. A cluster of the flowers placed in a vase in the house emits a delightful fragrance. It seems to prefer its own course of increasing itself; that is, to allow the seed to ripen and drop, taking root at will. It is really a beautiful vine, and I intend to grow all I can of it. I think this and *C. coccinea* would make a splendid pair. I have just heard of a gentleman that found a vine of this sort, not long ago, and paying \$2.00 for it; so you see it is not very plenty.—W. F. G., Springfield, Mass.

from oblong-ovate to lanceolate, acuminate, obtuse or sub-cordate at base, entire or three to five parted; peduncle terminal, bearing a large, nodding, bell-shaped, bluish purple flower; calyx cylindraceous below, the upper half of the sepals dilated and widely spreading, with broad and wavy thin margins; tails of the carpels about an inch long, silky or plumose, (in the form originally described with 'naked' or pubescent tails.)"

There is a variety of this species which is described as having "leaflets linear or

linear lanceolate, three to four pairs, the lobes scarcely two-twelfths to three-twelfths of an inch wide."

In regard to the distribution of this plant, the same authority says: "This is a variable species, various forms of it having been described under different names. It is also a southern species, its most northern station being given as Norfolk, Virginia. Thence it ranges south through Carolina and Georgia to Florida, (Quincy,) and west to Alabama, (coast to upper districts,) Mississippi, Louisiana and Houston, Texas. The narrow-leaved variety, Walteri, is chiefly a Florida form, and has been described under various names, and only lately restored as a variety. The species is quite a peculiar one, and not closely related to any other species. LOUDON says it is found also in Japan, but he has confounded it with some other species, which is, perhaps, similar."

In the description above, where it is said that the leaflets are "entire or three to five parted," reference is made to the lower leaflets of the plant, and which are not shown in our engraving. Although a strictly southern plant it appears to be willing to be domesticated in our colder climate, and we doubt if any one who should see it would be disappointed with it.

TREE CULTURE.

The destructive tendencies of the settlers of this country since its discovery bid fair to develop at last into an extreme of an equally pernicious character. Almost all landed proprietors of means "go in" for preserving their trees, and it is almost useless to explain to them the propriety of position and space. I believe every gardener of intelligence will bear me out in saying that there are few, if any, ornamental grounds in the country where full justice has been done in the way of thinning the original plantations, and, as a consequence, a fine tree is far more likely to be seen on a roadside, or elsewhere outside of ornamental grounds. Should a tree happen to have been left in a small state in the middle of a rosary, a flower garden, or a kitchen garden, by one of the class of men who mostly aid in the formation of country places, it usually happens that in the course of some years the tree is well developed, and, in its misplaced position, an unmiti-

gated nuisance. Nothing will induce most proprietors to remove the beautiful tree! He will exhibit as much reluctance to part with it as to produce good trees where they properly should be. I venture to say, if the gardeners of the country could report, most of them would agree in saying that their employers thus persistently go on, year after year, stubbornly retaining trees overshadowing hot-houses, Rose gardens, flower gardens, and in other false positions, and at the same time refusing to thin them in the very positions properly devoted to their growth. Perhaps labor is at the bottom of the trouble; if so, then it behooves every one to employ an intelligent gardener from the beginning, who will be able to steer clear of the pitfalls of inappropriate planting.—JAMES MACPHERSON.

THE PAST SUMMER.

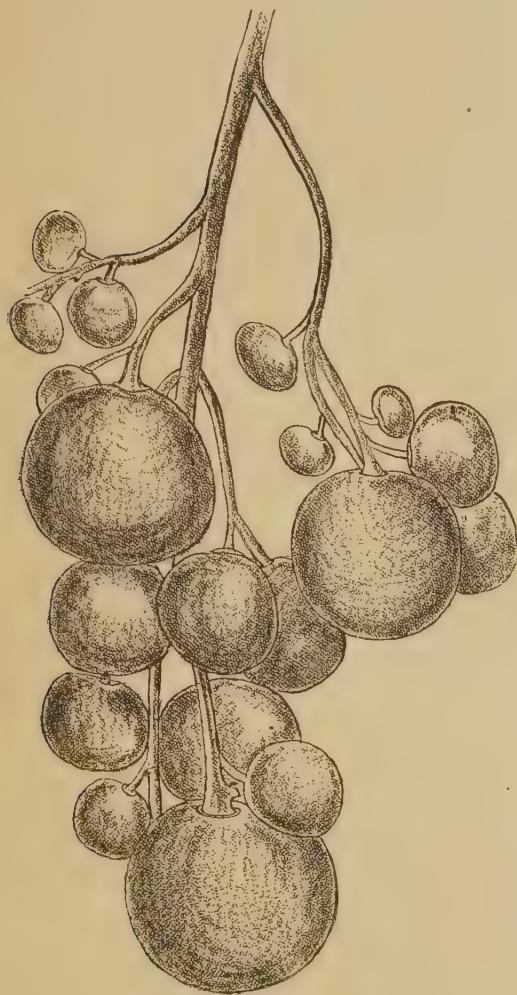
I wish to tell you what success I had with flowers last summer. I had some most beautiful Dahlias from seed sown in March; I had over a dozen different kinds of fine bright colors. But most of all, I want to mention a neglected plant, that is *Olea fragrans*, or Olive Plant. I never see anything published about it, but why this is so I cannot think, for to me it is a choice plant. If I could keep but one plant it would be that one, and I would say to flower loving friends, if you have not had one, just try it, and if you are not pleased with it you do not love a fragrant plant as well as I do. The flowers are not showy, as they are very small, but a few clusters will fill a room with the most delightful fragrance. We have had a remarkably cool summer, and not much fruit, but very few Apples. The early frost hurt the Corn considerably; small grain was good, so we cannot complain.—L. H., *Grundy Center, Iowa*.

OUR FLOWERS IN NOVEMBER.

At this date, November 7th, the following named flowers are blooming well on our grounds: Pansies, Verbenas, Candytuft, Sweet Alyssum, *Oxyura chrysanthemoides*, *Calendula Meteor*, *Gilia capitata*, *Malope grandiflora*, *Callirhoe pedata*, *Nemophila* and *Eschscholtzia*. The last two are especially fine. We have had several severe frosts, the trees are leafless, but still these low-growing, fragile beauties continue to show themselves.

IMPERFECT FERTILIZATION.

Heavy rains at the time that Grape vines are in bloom are usually quite injurious. The nature of the injury is very strikingly exhibited by the cut of a cluster of Grapes on this page, made from nature. The juicy Grape berry encloses the seed, and its principal use in the



CLUSTER OF GRAPES IMPERFECTLY FERTILIZED.

economy of the plant is to protect the seed. Fertilization results in the growth of the pulp as well as the perfection and growth of the seeds which it surrounds. When heavy rains prevail at blooming time the pollen is in great part washed away and but few ovules fertilized; then the bunches are straggling, loose and few berried, as here shown. Many of the berries, however, grow to an unusually large size, since the vine has few of them to support. These large berries are shown in our engraving; the seeds in these, of which there are a full number, have been perfectly fertilized. A few smaller ber-

ries in the center of the cluster may be noticed, and these represent those that have but one, or at most two seeds. But the very small berries are quite seedless. We noticed Brighton and Salem suffered most in this way on our own grounds and vicinity, because their flowers were just in the right condition, the anthers being ripe and scattering the pollen, at the time of a heavy rain. If for no other reasons, we see that on this account we should have different varieties of Grapes that bloom at different times.

MANURE IN THE GARDEN.

In November we usually get some fresh manure hauled to the garden to put around low plants that retain green leaves through the winter, and over the stems, as well as the roots, of those that die down and have been cut off at the ground. We spread some of it over ground intended for vegetables, and mulch the dwarf trees and berries, and especially the Quinces and Roses. As to using it on grass, we have given that up, preferring to use some powdery manure in spring, and letting the grass blades shelter each other unsmothered by coarse manure or anything heavier than the helpful snow. But there is one serious danger in all this, that of putting on the ground round all our cherished plants the seeds of vile, troublesome, destructive weeds. If we can obtain manure from stables where the cattle have been fed with green or siloed fodder, we escape this serious risk; but where hay made from late cut grass has been used, even a careful heating of the manure will fail to destroy all the weed-seeds that fill it.

In China, it seems, they don't sow any grass seed, nor have any meadows, for they use no milk or butter, and feed the few animals they keep chiefly on grain and waste foliage. They excel us in garden culture chiefly because the manure they use is entirely free from weed-seeds. This valuable aid we wastefully flood away through our sewers into the rivers. In China the utmost care is taken to save and use every bit and drop of faecal waste. We are very slowly beginning to see and acknowledge that earth-closet conservation, instead of water-waste, would at once promote health and fertility.—W.

A CHRYSANTHEMUM SHOW.

The Chrysanthemum exhibition by the Horticultural Society of Pennsylvania on the 5th and 6th days of November, was a grand success. Never before in Philadelphia has there been so fine a display of the Chrysanthemum. This plant has never before been cultivated here to the extent that it has been the past season. The Chrysanthemum is so nearly hardy that usually our people have given it little more attention than to plant it in the garden. The exhibition hall was tastefully arranged in parterres of beds and lots.

The two most prominent positions occupied by amateurs were those of **GEORGE BULOCK**, of Conshohocken, and **WISTAR MORRIS**, of Overbrook. These two gentlemen had good collections and large plants, and carried off all the honors and prizes of the amateur list. The plants of **GEORGE BULOCK**, which were of the dwarf-flowered varieties, were large and well grown. The flowers of **WISTAR MORRIS**' plants were of large size, and there was nothing in the hall to compete with this lot; it contained fifty plants and forty-seven varieties.

In the private collections were several new varieties, and particularly noticeable of these were *Diana*, *Louis Bartlett*, *Tokio* and *Lord Coleridge*, the latter a handsome one of pinkish color, and of dwarf habit.

The principal professional exhibitors were **CRAIG AND BROTHER**, **HARRIS**, **DREER**, **JOHN DICK**, **PLENDER**, and others. The premiums were taken by **CRAIG AND BROTHER**, and **HARRIS**. A lot of seedling Chrysanthemums that were shown attracted a great deal of attention, and were awarded a special premium.

A special premium was also awarded the new Rose of Mr. **EVANS**, which he purchased of Mr. **BENNETT**, in England, for an enormous price. It is often referred to as the \$5000 Rose. It is a *Jacqueminot* in color, but delightfully sweet and a very free bloomer.

An orchestra enlivened the close of the exhibition with music. This is the first time that Philadelphia has witnessed a Chrysanthemum exhibition, and as a lover of this dear, old-fashioned flower, I hope the society may repeat it every year.—A. S. H.

RED SPIDER.

It is stated in most all works on the insect enemies of the florist that the red spider loves a hot, dry atmosphere, and that plenty of water syringed on them will rid the plants of them. Now, this is good as far as it goes, but it does not go far enough. I find that the red spider luxuriates in the moss that is apt to grow up in a greenhouse that is kept damp, also in the moss that grows in a flower pot that is too damp. He is not afraid to sail round the aquarium on a duckweed.

I find that if water is kept standing till it is tepid it is of no value to drive him away. So then, what must we do to get rid of this pest? I think the following precautions will be good. 1. Never allow any moss to grow in or around the greenhouse. 2. Use cool water only to syringe with. 3. In syringing, use plenty of water. 4. Never allow the atmosphere of the house to get too dry. I do not think we can entirely get rid of the pest, but we can keep it in check. I hope others may look this matter up, and give us their experience, as I think considerable is not known about it that might be by some of us.—T. B., *Manhattan, Kansas*.

NOTE FROM MELBOURNE.

Our people are, I think, steadily educating themselves, aided by precept and example, to the admiration of, and love for, the grandest works of nature in the floral kingdom. A large drapery establishment newly opened in the heart of the city, offers as an attraction a grand conservatory and greenery, with couches, seats, &c., as a cool lounge for their patronesses during the summer heats, and no doubt they will see their reward in the enterprise, which is certainly a new departure in catering for the public taste and accommodation.

This bursting-into-the-buddy season, as **DICKENS** humorously termed spring, affords us much gratification olfactorily as well as ocularily, so to speak. Our *Mimosas*, familiarly *Wattles*, give off a grand perfume in the open, although too strong for in-doors; the *Pittosporum* also gives out a grand aroma, and generally the trees and shrubs, at this time of the year, are more or less diffusive of fragrance.—S. W. V., *Australia*.

THE ONEIDA GRAPE.

Among the varieties of native Grapes now attracting attention is one called Oneida. It is being introduced by A. M. PURDY, of Palmyra, N. Y., and from a recent letter received from him, we quote the following account of its origin and character: "The Oneida was grown from seed taken from Rogers' 19, Merrimac, without reference to fertilizing from any other sort. Seed planted in 1871, by Mr. THACKER, of Oneida County, N. Y. It yielded its first fruit in the year 1875, when four years old, and has yielded every season since, and matured its crop well, even this worst Grape season I have ever known. It is a strong, healthy grower, free, so far, from disease of any kind. Wood short-jointed, and ripens up well; a good bearer, ripening with Concord; bunches medium size, and berries about same size as Concord, and compact on bunch, most of the bunches shouldered. In color like Delaware, which it resembles, only more than double its size. It is a splendid keeper, the skin being thick, but after keeping sometime, brittle, and if allowed to dry makes raisins. Skin brittle and can be eaten with pulp, leaving no unpleasant taste." We have no personal knowledge of this new variety, and have never seen it. A long keeping variety of Grapes is much desired, and if this one proves truly to have this qualification it will become very valuable. Of course, like all new varieties, this one has yet to stand the test of ordinary cultivation in various localities.

WEEDS! OR INSECTS?

An excellent question for the numerous winter evening rural debating societies would be that, whether insects or weeds are most injurious to crops? Insects are most complained of, but that is because we are given to lay blame on any other creatures than ourselves, and, in the case of the weeds, we must keep the blame at home. I have just been in a gem of a garden, where there was a little of everything grown, but not a weed was tolerated. Everything had sufficient room, and the growth of the plants, with the beauty and perfection of their produce, was a most instructive sight, and a practical corroboration of the truth of the adage, that a little land well tilled is better than any expanse of ground allowed to occupy itself during

any part of the season with useless plants. How few places there are where a single plant of any kind escapes robbery and the loss of its best properties from competing plants—weeds!

Weeds! "Destroy them in the bud!" That advice should be rung in the ears of every pretender at garden cultivation. No one who suppresses all weeds at their first appearance will make complaint about insects. They may attack, but will be sure to be routed, thanks to the munition directions furnished by VICK'S MAGAZINE.—W.

A NEW BLACKBERRY.

WM. PARRY, the well known fruit-grower is out with a new variety of Blackberry, called Wilson Junior. It is a seedling of Wilson's Early Blackberry, combining, it is said, all the good qualities of the parent, with some important additions; or, in other words, it is substantially a reproduction of that good old variety in a new berry, ripening earlier and more productive. The fruit is large, luscious and sweet as soon as black, holds its bright color and bears carriage well. Such is the description.

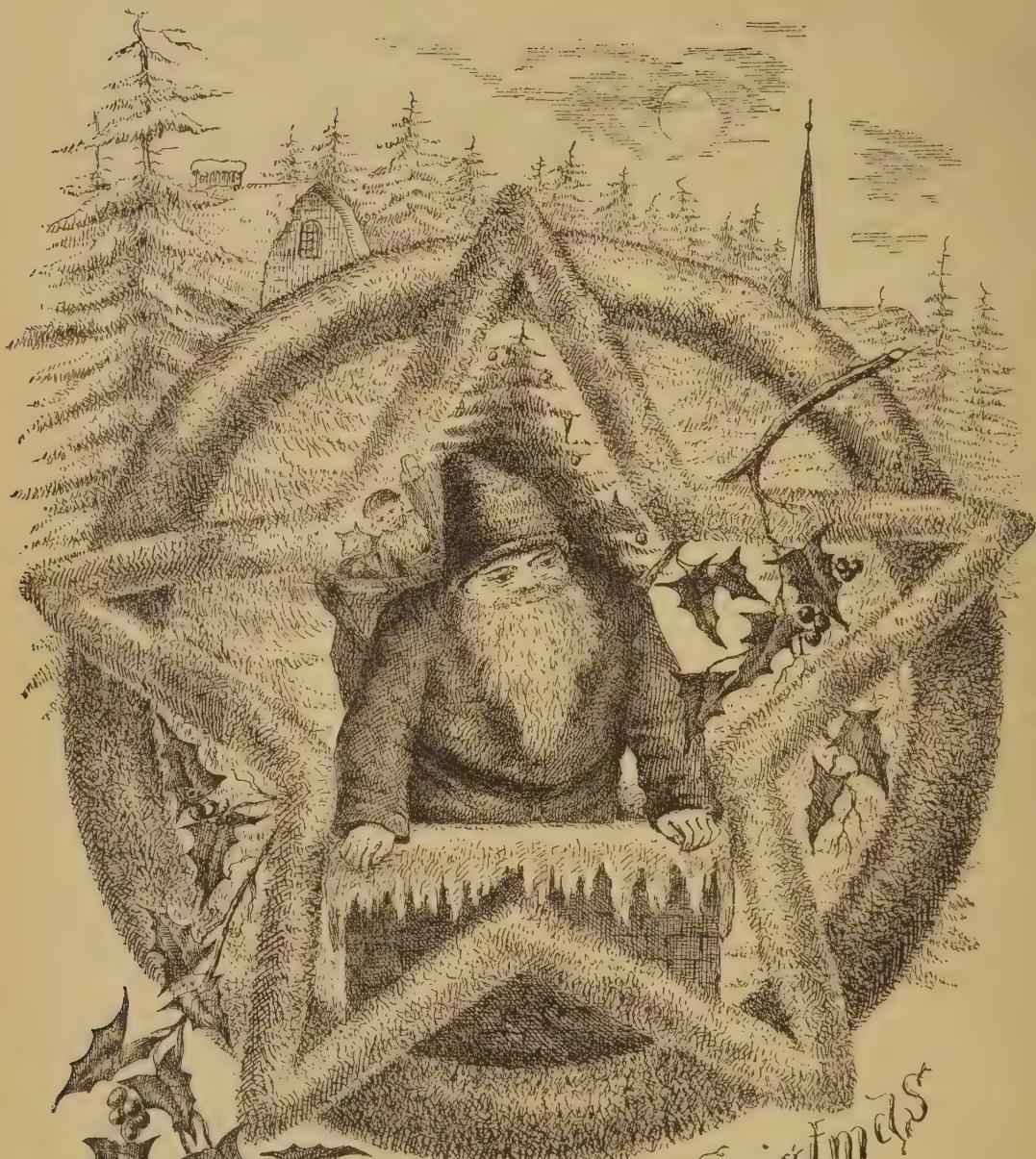
QUEER HONESTY.

Revue Horticole recommends for ornament a new use of the seed-pouches of *Lunaria biennis*, commonly known as Honesty. It is to select some pots of plants with appropriate foliage, or foliage somewhat resembling that of *Lunaria*, and to insert in the midst of the plant, among the foliage, some stems of *Lunaria* bearing seed vessels, and properly securing them, thus imitating the natural plant. According to the same journal, these seed vessels are called "the Pope's Money" in common French parlance.

FUCHSIA SEED AND CUTTINGS.

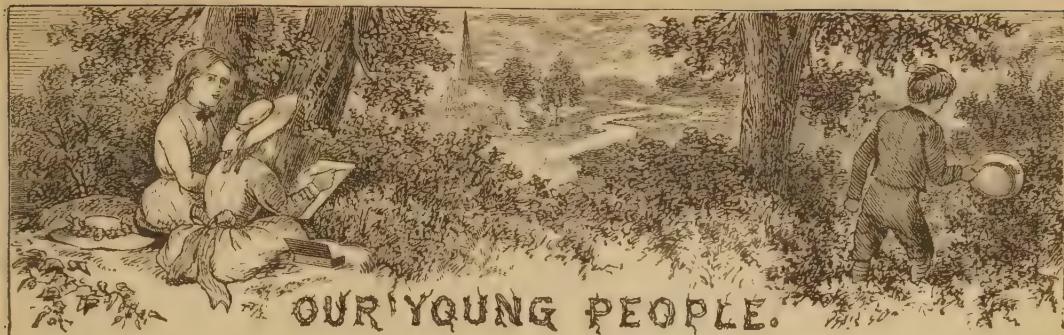
Please tell me in next number the treatment of Fuchsia seeds and seedlings.—M. C.

It is best to sow Fuchsia seed as soon as possible after it is ripe. Sow in a light, porous soil, and keep an even moisture in it by covering with a bell-glass, or by other means, and when the young plants have made two pairs of leaves prick them off singly and grow them on in the manner of cuttings, as has been described in this volume.



Merry Christmas
To all,
and a
Happy New Year.





OUR YOUNG PEOPLE.

BEFORE CHRISTMAS.

I.

Yes, it was just one week before, and it was in a college town, where Pearl Warren and her mother were occupying a suite of apartments until such time as her course of study should be completed, that Pearl rushed in, one day, from a blustering storm, and laying down an arm load of class books, exclaimed,

"Mother, I've been made just sick of the fol-de-rols that I've been trying so hard to finish in time for Christmas gifts for the folks at home. Do you know that not one of them is of the least use in a case of real need or suffering? and now—."

"It appears to me," interrupted her mother, "that you have made the discovery rather suddenly, and are most unduly excited over it, considering that the home folks are not likely to be in need or suffering. Please lay off your wraps now, and we'll go out to tea."

"I couldn't swallow a bite, mother, until I've explained, and got your promise of help. You know I was to call and see the laundress about those pieces we wanted. Well, she's no laundress at all, though she does her work beautifully, but is the wife of that Mr. Boyd, who was sick so many months at their boarding house, and for whom we heard so much sympathy expressed. Well, it seems that before any one knew they were short of money she had sold their watches and her jewelry to pay for medicine and board; and then, one day, she broke down entirely, and in tears told the doctor all about it. She said she was well and strong and willing to do any kind of work, and live more cheaply if there were only a way to get started. So a few people went to work and rented a small house, and donated some second-hand

furniture, a bed, a cooking stove and a rag carpet, and then moved them into the house, and their landlady and the other boarders started them with food to last for several days. She told me this, and added, that she could 'put her pride in her pocket' and be thankful for favors; but her husband could never endure to incur obligations, and in his weakness had broken down and cried like a child, charging her that if any one inquired whether they were needing anything she was to say, 'No.' She said that when their large mill floated off in a flood, stocked with new machinery and twenty thousand bushels of wheat, that she did the crying then, while he was brave hearted and hopeful."

"Daughter, how did she come to tell you all this?"

"I'll tell you. I noticed Mr. Boyd looking very thin and feeble, he was sitting in a bare wooden rocker with a stiff, straight back, made of upright rods so far apart that you could feel every one, separately, digging into you; you know the kind I mean. And he sat crouching over the cook stove, as though that, nor anything else, could ever warm him. So I could not bear to open the front door and let a gust in on him, but went out the back way. Mrs. Boyd followed me, and I said, 'Your husband does not look at all able to sit up,' and she answered, 'He is not, but he gets so cold in the bed room, this bitter weather, that he comes out every little while to get warm. If he could stay in his chair I could make it more comfortable for him by using the bed covers; but he will not allow that, because he so soon needs them again where they are. He is scarcely warm the whole night through, but will not consent to my keeping a fire on account of the fuel. But we are hoping the weather will soften soon,

and make it more comfortable for him. He is just in that bloodless, sensitive condition that makes him fancy that the wind is blowing about him all the time, especially at night.' Now, mother, something must be done for that man this very evening. I could not sleep a wink and know that he was shivering."

To appreciate Mrs. Warren's mingled feelings at her daughter's narration, one must first realize that for years she had hoped and craved and longed, with all that is implied by other words of like meaning, that her daughter might mature into a thoroughly unselfish and useful woman. The experience just related was the first of the kind that Pearl had encountered when there was only herself to receive and act upon impressions. That she had been so quickly observant and at the same time had assumed a personal responsibility in the matter, so impressed Mrs. Warren that for a little time she was too absorbed in the dawning fulfillment of hopes regarding her daughter's future career, to feel properly distressed over Mr. Boyd's present suffering. Pearl noticed her mother's attentive interest, and gave Mr. Boyd all the credit, and as they went out to tea, was saying, "Now you see, mother, why my pretty things for Christmas seem so worthless; when not one of them can be of the least use in making that man comfortable, to-night."

"You might give him that salmon-colored, star-stitch shawl you crotched, to wrap his feet in."

"Mother, you know he would not want to use such a delicate thing! How can you jest! The first thing needed is something thick and soft to cover that dreadful chair—something that will reach to the floor to keep the wind from his ankles. A bed comforter would do; could you spare one?"

"Certainly."

"O, good! And there ought to be a cushion, too. He's nothing but bones! And, O, those little down pillows we had at home, and the foot-muff, would be so nice for him, if we had them here."

"They are all in the packing box, down in the basement."

"O, goody, good! how fortunate that is! Now, let me think what next. O, yes; he shivers half the night, although they've plenty of cover, such as they are,

bed quilts, you know. What can you suggest?"

"Perhaps a thick, wooly blanket wrapped about him from his neck down, just as he gets into bed, would prevent that feeling of chill which strikes to the marrow of such feeble invalids. And a little pure Grape wine, I should think, would aid materially; not that made of logwood, whiskey, sugar and alum. You'll find the wine and a pair of heavy blankets packed with the other things. I'll give you one of the blankets for your own to do as you please with; the other I will loan you."

"O, you blessed mother! How comfortable we shall make him!"

"You need not say 'we,'" rejoined Mrs. Warren, "I've nothing at all to do with him."

"Why, mother! what can you mean? You, always so tender hearted!"

"I mean that I've never seen the man, and know nothing about his condition only through you. Of course, I'll do what I can to enable you to carry out your wishes in the case. But this is your affair altogether; not mine."

"Well," answered Pearl, "it's very little I could do without your help, that's certain."

After tea, the things to be used were brought up, and as Pearl surveyed the pile she told her mother she should need another kind of "help," she thought, in carrying them to their destination. She was soon informed that she could not be allowed to go alone after night, if there were nothing to carry.

When they had sewed dark, bright covers on the down pillows and cushion, (so that the Boyds would not be afraid of soiling them, Mrs. Warren said,) and had packed the foot muff, wine, small pillows and cushion into a large basket, and bound up into rolls the "comfort," blankets and a large pillow, with a nice, white case on it, they were ready to start. They adjusted and re-adjusted the bulky articles in their arms, and could only laugh at each other's grotesque appearance.

"It is so late and stormy," said Mrs. Warren, "that we are not likely to meet any one, and the cumbrous loads are not heavy." So they hastened away over the snow-covered street until they came near a lamp post, when they suddenly stopped. Beyond it they saw a policeman ap-

proaching, who also stopped just under the lamp, and seemed to be looking at them.

"He thinks we are thieves," whispered Mrs. Warren. But presently he started slowly to the right on a cross street, and as Mr. Boyd lived at the left, Pearl and her mother hurried on. But just as they were in the full blaze of the lamp the policeman wheeled suddenly, and crying out lustily, "Stop!" hastened toward them. Conscious of the ludicrous spectacle they presented, Pearl laughed outright as they halted, and Mrs. Warren did little better. The man looked at them curiously for a moment, when Pearl, assuming the responsibility of the situation, said, "We are only taking some things to Mr. Boyd, who is sick; you probably know of him. We, ourselves, live at No. 41 South Campus Street." The policeman by this time was laughing, too, and begging their pardon, passed on.

Arrived at Mr. Boyd's, Pearl and her mother passed around to the back porch, where they laid down their things, and rapping, were soon seated within. It so chanced that Mr. Boyd was in his room, though his wife said he would be out again before he settled for the night. So Pearl quietly made known her business, and she and the glad and thankful Mrs. Boyd soon had the things inside. Pearl then arranged the chair just to her liking, first putting the foot-muff under the stove to warm, and her mother smiled to notice that she had brought a darning needle to fasten the top of the "comfort" over the back of the chair to keep it from slipping down. Next, she placed the soft cushion in the seat, and after exchanging a few words with Mrs. Boyd, a small, wooden box was produced, which Pearl turned upside down for a foot rest, and drawing the bottom of the comfort over it, placed thereon the fur-lined foot-muff. Then she unrolled the blankets, and telling Mrs. Boyd that one of these was her own, she presented it to her. Seeing Mrs. Boyd glance doubtfully toward her mother, who sat with a book, seeming absorbed, Pearl hastily said, "O, she knows, it's all right," and then explained how the other was to be used.

In the silence which ensued there was a low call, and Mrs. Boyd hastened to assist her husband out to the fire, while Pearl and her mother turned their backs toward his doorway. He must have

paused when he reached his chair, for his wife said, "Sit right down, dear; doesn't it look warm and comfortable?"

Then Pearl whispered, "Mother, you'll fix his chair pillows?" "No," was the answer, "he does not know me; I should only embarrass him." So Pearl took them from behind the stove, saying, "Good evening, Mr. Boyd; please tell me just where to place these at your back." After a change or two they were satisfactorily arranged, one having been fastened to the top of the chair for a head rest. Then Pearl gathered up the two side corners of the "comfort," it having been placed in the chair corner-wise, and drew them up across his lap, thus forming a complete wrapping. By this time her face was quite flushed with a sense that she was making herself very officious, though well meaning, and she hastily returned to her mother's side, who then arose, and after being simply introduced to the invalid as "Pearl's mother," they said, "Good night," and departed, though not until Mr. Boyd had taken Pearl by the hand, and said that he was indebted to her for the first comfortable seat he had had since coming to that house. Happy tears sprang to her eyes, and she tried to say some very appropriate thing, but never knew afterward what it was, but hoped it was something about the wine.

As she and her mother hastened homeward, she said, "Why is it that in bringing so many extra things from home you did not bring the adjustable chair, which would have been so roomy and comfortable for Mr. Boyd?"

"My dear, the 'extras' you refer to were easily packed. I brought no furniture that I did not know would be needed. Perhaps you could rent an invalid's chair at a second-hand furniture store."

"I had not thought of that. But our 'Young People's Committee' for decorating our church for Christmas are each to purchase a handsome plant of a florist, to be tastefully grouped at each end of the chancel. And, O dear! I've only enough spending money left to get mine. How much more good the chair would do!"

"You are pledged," said her mother, "to use no artificial designs to imitate nature, and should not grudge God's flowers to His church."

"I do not; I do not," she answered; and as she stamped the snow from her feet on the piazza, and passed within doors, she was saying, "One must be done, and the other not left undone." We shall see.—AUNT MARJORIE.

LETTER TO YOUNG PEOPLE.

DEAR YOUNG FRIENDS: Here is a little problem: Given the wondrous work of the Great Supreme in the ever varying developments of the floral kingdom; further, given that many, most of these, are only to be clearly observed by the use of powerful magnifying lenses; and, that these things, being expensive, are beyond the means of by far the larger proportion of those of an inquiring mind. How is this difficulty to be tided over? Some one, perhaps Lord NELSON or GEORGE WASHINGTON, any way a practical man, is reported to have said, "Never point out a hole in a stocking unless you are prepared with thread and needle to mend it." Just so. Well, here's the desired thread and needle, the solution of the above problem, not my original idea, but met with in a Ballaarat paper. Co-operation, boys and girls, that power by which small and large communities succeed and go a-head. Voila! you youngsters would like a good microscope, cost, say for example, \$10; well, go to work and get forty boys and girls in one locality to subscribe a quarter, and there's your money. Then let each hold it for a week, according to his order of priority on the list, and all having enjoyed its benefits, either "circulate" it again or "auction" it amongst the company, or sell it by tender, dividing the proceeds. This done in a business like manner, with the aid and supervision of parents, would, beyond the pleasure of the instrument itself in the family circle, initiate you young people in business practices, and impress upon you the benefits of fellowship and co-operation.—S. W. V.

LETTER AND ANSWER.

The letter below was evidently intended for publication, and the writer must not be disappointed. She says:

DEAR AUNT MARJORIE: The season for flowers is about over; but the last time I saw the hills and bluffs they were all aglow with crimson and gold, save here and there some scrubby Pines and Cedars. Beneath the trees were spots of green grass and some gray and moss-covered rocks. I am now going

to school in the same little school house at the corner of the woods. I love to go to school, and I like my school teacher very well, and I like my school mates, and I like everything and everybody.

Now, I want to thank you and the editor for the many compliments you have given me; and also for answering my many questions, for I must say that I have learned a good many things since I commenced with you. I see in the "Bureau" of the October number of the MAGAZINE, a notice of a book called "Plant Life." I would like to have it, but I cannot tell where it can be obtained, nor what would be the cost. Please tell me, and oblige your little friend. Now, this is the last letter for this year, but I hope not forever. So, good bye.—I. M. P., *Attica, Ind.*

If you send a postal card asking HENRY HOLT & CO., New York City, the price of "Plant Life," you will get an answer. Well, unless you were to write it like this: *henry holt & co new york city please send me the price of plant life, which would probably receive no attention. But we are not afraid of our MAGAZINE contributors writing a card like that.*

LETTER FROM A COLORADO BOY.

I am only eight years old and I do like flowers so very much I thought I would ask you to please tell me the name of the plant enclosed. It is the bloom and leaf and the tassel after it blooms. Ma has taken the MAGAZINE ever since I can remember. I am a little boy, and I hope you will correct all my poor spelling.—OGDEN F.—

Here follows a note from his mother.

Will you please to give the name of the plant enclosed, and oblige my little son? It often grows twenty feet in one summer, and is the prettiest one I ever saw.—E. I. F.—, *Arboles, Colorado.*

The specimen enclosed was that of Clematis Virginiana. We hope this young lover of nature will continue to notice plants and all other natural objects, and he will find much to learn and to enjoy. We shall be pleased to hear from him again.

WHITE FLOWERS.

What are the snow-flakes? Daisies white,
Roses that died on a summer night,
When the deep sky put on a deeper hue,
And the world smiled out into Violets blue,
When the air was fragrant the whole night through,
And the stars hung low and bright.

What is the frost? The early flowers
That woke into life in the wild March hours,
And, half afraid of its boisterous mood,
Trembled and paled where they shyly stood,
Close to the heart of the shivering wood,
That under its brown cloak cowers!

What is winter? Why, just the ghost
Of the dear old summer we've loved and lost;
The white reflection of all things sweet,
All the most perfect, most complete;
All that the heart goes out to meet
Lies under the snow and frost!

—OLIVE HARRIS.



The sun has hidden his shining face,
And wind and clouds are having a chase,
While now and then comes a flake of snow,
Lightly tossed on the air to and fro.

Thicker and faster they gaily dance,
Covering what'er in their way may chance
With a robe of pure and spotless white,
From lowly valley to mountain height.

Then through river, through the sun-rays stream,
And touching the snow they make it seem
Like countless jewels priceless and rare,
Sparkling and glistening everywhere.

So gentle words spoken one by one,
And kindly actions for Christ's sake done,
These make a life true, holy, and bright,
As flake by flake all is clothed in white.



A PLEASANT AND USEFUL BOOK.—Such is "The Wonders of Plant Life under the Microscope," by SOPHIE B. HERRICK; published in New York by G. P. PUTNAM'S SONS, at one dollar and a half. In this volume we have illustrated some of the essential principles of vegetable life. Minute organisms and textures whose structures can only be perceived and understood under the magnifying lens, are described in the clearest manner and made comprehensible by beautiful engravings. Vegetable cells, their structure and contents, vegetable hairs, fresh water Algae, Desmids, Diatoms, Bacteria, Fungi, Lichens, Liverworts, Mosses and Ferns are all brought under view through the instrument, and made to reveal their structure and modes of propagation. Then the physiology of plants is considered; some features of Corn and its congeners. The Microscope among the Flowers; the Pitcher Plants, and Insectivorous Plants are the titles of other chapters. This book is exactly what many young botanists and microscopists need, and will want when they know of it. Our correspondent from Australia has shown, in this number, how easily a microscope might be procured in almost any neighborhood. This book would be a valuable one to accompany the instrument. And now we wish to suggest that we think, instead of allowing the instrument to pass around among those who contributed to purchase it, it shall be used by all at a general gathering or meeting, once a week or once in two weeks, and thus form the nucleus of a scientific society. It is unnecessary to say more, for the first meeting and use of the instrument, will make apparent the manner of proceeding. When shall we hear of the first Young People's Scientific Society? If our assistance in any manner, or further advice, is needed, it can be had.

REPORT OF THE MICHIGAN BOARD OF AGRICULTURE.—We are in receipt of this report from September, 1880, to September, 1882. That portion of it relating to the State Agricultural College is specially interesting. This institution is making itself known, and is undoubtedly one of the best of its kind in the country, and well worthy the patronage of young gentlemen seeking to qualify themselves in the best manner for the pursuit of agriculture and horticulture. A map of the botanic garden is given, from which we judge there has been a partially successful attempt of an arrangement of plants on the ground in a manner that combines both scientific and picturesque demands as well as suiting the plants to their proper soils. This is very well as a trial, but the grounds are far too small for the purpose, as a dozen well grown trees would cover the whole space. Ten acres, at least, should be devoted to this purpose, and a State like Michigan ought not to be satisfied with any thing smaller. About seven hundred flowering plants are now in the grounds. It is a good beginning, but it should not stop here. The whole report is very instructive.

A GRAPE GROWERS' MANUAL.—We have received from BUSH AND SON AND MEISSNER, of Bushberg, Missouri, a copy of their Manual on the Grape, of the third edition, newly revised. It is a very complete work on our native vines, including their origin, description, cultivation, pruning, training, propagation, diseases, injurious insects, and wine making. The classification and description of bo-

tanical species is by Dr. ENGELMANN, and the rest of the volume shows the work of a master hand, skilled in all the practical work of the vineyard. The volume is handsomely and instructively illustrated in its different parts, and we can freely recommend it to all seeking information in regard to the vine. It is sold at a low price, library edition, cloth, \$1.00; paper 25 cents. Address, BUSH AND SON AND MEISSNER, Bushberg, Mo.

THE GOLDFISH AND ITS CULTURE.—This is the title of a hundred page manual published at Cincinnati, by the author, HUGO MULERTT. It is a most complete work, and is evidently written by one possessed of thorough experience with his subject in all its details. The work is divided into four parts, as follows: History of the Goldfish in this and its native country; History and construction of fish ponds; Anatomy and physiology of the Goldfish, its propagation and care in ponds and aquaria; The enemies and diseases of the fish, and how to combat and prevent them. One wanting to know all about Goldfish can inform himself from this volume, and by raising the fish. Price, prepaid, \$1.00.

SPECIAL THANKS.—Our thanks are due to Mrs. A. L. H. WALTMAN, of Harrisburgh, Pa., and to JAS. MACPHERSON, of Canandaigua, N. Y., formerly gardener to Hon. J. D. CAMERON, for correspondence which has been freely used and published in the present number in regard to the horticultural features of Harrisburgh, the capital of Pennsylvania.

FLOWER SEEDS FOR SCHOOLS.—Our offer of flower seeds for schools will be found in full in our last number, on page 352.

FRIENDS OF THE MAGAZINE.

Subscriptions for 1884 have already commenced to come in, and we confidently expect our list to be greatly increased. Some who never tried to obtain subscribers before have sent in quite a number of names, and say that in a short time they obtained good clubs, and these, too, were in small communities. We believe a little effort by our old friends will bring in many new ones, and the work will not end there. The new readers will undoubtedly be benefitted, and will show their interest by the increased attractions of their grounds and gardens, and we, also being benefitted, shall be able to make the MAGAZINE handsomer and more useful. All the efforts put forth by our friends to increase the circulation of the MAGAZINE will come back in doubled blessings to them. The MAGAZINE was started because of many requests to this effect. Our aim has been to conduct it so that it might be useful to every one, making it equal to the wants of the beginner, and not neglecting those who have had experience. Its pages have been always open to the interchange of views among its readers, and to answer their inquiries. As the revered LINCOLN said of our government, so we can say of the Magazine—it is of the people, for the people, and by the people. We come, therefore, with confidence, and ask our friends to lend their aid at this time to bring in new subscribers for 1884. Specimen numbers for this purpose will be sent, if desired. Our full terms will be found elsewhere. We offer clubbing rates to those who wish to send in that way; but most will, no doubt, secure Good Cheer, or avail themselves of the opportunity of subscribing for Harper's publications at reduced rates.

THE MAGAZINE HELPFUL.

To improve in whatever we do it is necessary to come in contact with those engaged in the same pursuits. In no way can this be done as well as by reading their opinions and the descriptions of their methods of work. Every one engaged in gardening in any form should regularly read what others are doing in the same way; and if we are rearing plants merely for pleasure, we shall find our pleasure greatly enhanced by the assistance and sympathy of others. We offer the MAGAZINE as a medium by which our readers may help each other, and its pages are open to their use. Photography is now becoming so common as an amateur art, it often occurs that views of much interest can be taken with little trouble and expense. By means of photographs of flowers, fruits, plants, trees, landscapes and other views, we can prepare accurate engravings that can be enjoyed by all, and those of merit that are sent to us for this purpose will be so employed.

BINDING THE MAGAZINE.

We will bind the MAGAZINE in nice cloth covers, for any subscriber, for 50 cents, and return the book, with the postage or expressage prepaid by us. If subscribers will send us the numbers in season, we will have the volume bound and returned, if possible, before the Christmas holidays. Please give your name on the package when sent, so that we may know to whom it belongs.

BOUND VOLUMES.

Bound volumes of this MAGAZINE make splendid and useful holiday presents. We can furnish volumes from the commencement — 1878-79-80-81-82-83 — for \$1.75 each, or the six for \$9.00. We will prepay the express charges. Bound volumes for 1883 will be ready by the 5th of December.

EXTRA COPIES.

Many persons wish to send a copy of the MAGAZINE to some friend, on account of an article or illustration which it contains, but do not like to lose a number from the volume. We will forward a copy when wanted by any of our subscribers, if so requested, and address sent, with TEN CENTS enclosed.

LOST NUMBERS.

One more number will complete the SIXTH VOLUME of the MAGAZINE and the year 1883. It is quite probable, through some mistake, some numbers may not have been received, which will leave the volume incomplete. If this is so, please send us a postal card, stating what number you need, and it shall be forwarded. We will also replace, without charge, any number that may have been lost or damaged.

DO NOT DELAY.

During this month and the next the subscriptions for nearly all the periodicals in the country are made up. Now is the time to introduce to your friends the subject of taking VICK'S MAGAZINE, for, by so doing, each subscriber will receive in addition a copy of Good Cheer, or he will be able to take advantage of our low terms to secure any of Harper's periodicals.

GOOD CHEER, OR HARPER'S.

All subscribers who avail themselves of our low rates on Harper's Monthly and Weeklies will not be entitled to Good Cheer, but otherwise our MAGAZINE and Good Cheer will be sent for one year to every subscriber at one dollar and twenty-five cents.

VICK'S FLORAL GUIDE FOR 1884.

We design to send each of our subscribers and customers a copy of the FLORAL GUIDE for 1884 for a holiday present, but it often happens, by reason of the great number sent, that all do not receive copies even by New Year's day. If, however, copies are not received soon after that time, please notify us by postal.

CLOTH COVERS FOR MAGAZINE.

We will furnish elegant cloth covers for the MAGAZINE, to our subscribers, for 25 cents each, and prepay postage. Any bookbinder can put on these covers at a trifling expense.

NOT A BAD HOLIDAY PRESENT.

A subscription to our MAGAZINE would not be a bad holiday present.

MAGAZINE CLUBS.**CLUBS OF FIVE.**

The MAGAZINE and Good Cheer will be sent to clubs of five subscribers for one year for \$6.25, or \$1.25 each; or, the MAGAZINE alone, to clubs of five, for \$5.00 a year, and the person getting up the club will be entitled to one of our Floral Chromos on paper.

CLUBS OF TWELVE.

The MAGAZINE and Good Cheer will be sent to clubs of twelve for \$15.00; or the MAGAZINE alone for \$12.00, and to the person getting up the club will be sent, with charges paid, one of our Chromos on cloth and stretcher.

CLUBS OF TWENTY.

The MAGAZINE and Good Cheer will be sent to clubs of twenty for \$25.00; or the MAGAZINE alone for \$20.00, and the person getting up the club will be sent, with charges paid, one of our Floral Chromos handsomely framed in Walnut and Gilt, or a copy of Harper's Magazine for a year.

Thus it will be seen that members of the club can pay \$1.25 and receive the MAGAZINE and Good Cheer, or they can pay \$1.00 and receive only the MAGAZINE.

The beautiful Chromos which will be sent are, the Floral Cross, Winter Indoors and Out, and Bouquet of Lilies. The first is eighteen by twenty-three inches, and the others nineteen by twenty-four inches.

\$300 IN PRIZES.**PRIZE ESSAYS.**

For the purpose of obtaining the best practical information for the benefit of our readers, we offer \$25.00 in Seeds and Plants, selected from our Catalogue, for the best well written article, embodying personal experience, on each of the following subjects:

1. The cultivation of the Cabbage for market.

2. Small fruits for the family garden.

3. The cultivation of Celery.

4. The field cultivation of Onions.

5. How can Apples be profitably raised.

6. Planting and management of Grape vines in the family garden.

7. The cultivation of the Strawberry for market.

8. The construction, planting and management of a cold Grapery.

9. The construction, heating and management of a small conservatory.

10. The cultivation of the Raspberry for market.

11. Is irrigation for gardens and small fruit crops of any particular value in that part of the country east of the Mississippi?

12. What root crops can be raised with profit for feeding cattle, and how?

Competitors on the first two subjects should send their manuscript so as to reach us not later than the first of December next. Manuscripts from competitors for numbers 4 and 10 should be received here by the first day of January, 1884. Competitors for numbers 3, 5, 6, 7, 8, 9, 11 and 12 should send manuscripts to reach us by the 20th of February.

The examination of the various communications will be made by competent persons having practical knowledge in regard to each subject, and the decisions will be based entirely on the merits of the writings, but statement of personal experience will in all cases be considered essential.

The prize communications will be published in the MAGAZINE. Those not accepted will be at the disposal of the writers. Those wishing them returned will please send stamps for the purpose. Unaccepted communications left in our possession will be examined, and anything new or of special merit will be published, giving the authors credit. Announcement of prizes will be made in our issues of January, February and March.

SINGLE SUBSCRIBERS.

To many post offices in the country we are sending only one copy of the MAGAZINE. We hope to have the aid of the subscribers at these places in increasing our circulation the coming year. Friends, will you not mention the subject to your neighbors, and invite them to send for the new volume with you? Any of our subscribers who wish sample copies to show for this purpose can have them by informing us by postal card. By all means, see that a copy is ordered for the use of your public school. Give the children an opportunity to learn about plants and flowers, and improve their tastes, and to grow up with habits that will benefit themselves and the community. Mention our offer of flower seeds for the school grounds.

